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Specifiers Properties information exchange (SPie)

Minimum Building Information Model (BIM) Object Definitions

Kalin Associates, Inc.

March 2013

*1121 Washington Street
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Prepared under CRADA-07-CERL-02 under the supervision of

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Final Report

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Abstract

The use of Building Information Modeling (BIM) technology beyond geometric collision detection requires that owners specify minimum content standards and define the formats in which BIM data are to be delivered. Such standards can be viewed as performance-based specifications for information deliverables that may be objectively tested and enforced. This report documents the specification of minimum BIM object definitions of 498 BIM object classes. These specifications were derived from Unified Facilities Guide Specifications (UFGS) requirements and typical equipment schedules published in “The COBie Guide” (<http://buildingsmartalliance.org/index.php/projects/cobieguide/>). Each object is classified based on the OmniClass Product Table Schema (<http://www.omniclass.org/>).

The National Building Information Model Standard (NBIMS-US) has begun the process of coordinating the development of information-exchange standards in the United States. This document establishes the proposed minimum BIM object definitions for submittal under the round of NBIMS-US balloting scheduled for 2013.

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Preface

This study was conducted for the US Army Engineer Research and Development Center, Construction Engineering Research Laboratory (ERDC-CERL) and the National Institute of Building Sciences (NIBS) by Kalin Associates, Inc., under CRADA-07-CERL-02, “Cooperative Research and Development Agreement Between US Army Engineer Research and Development Center—Construction Engineering Laboratory and National Institute Of Building Sciences.” The technical reviewer was Dr. E. William East (CEERD-CF-N), and the project manager at NIBS was Dominique Fernandez.

The work was supervised and monitored by the Engineering Processes Branch (CF-N) of the Facilities Division (CF), ERDC-CERL. Dr. East was the Project Manager. At the time of publication, Donald K. Hicks was Chief, CEERD-CF-N; L. Michael Golish was Chief, CEERD-CF; and Martin J. Savoie, CEERD-CV-ZT, was the Technical Director for Installations. The Deputy Director of ERDC-CERL was Dr. Kirankumar Topudurti and the Director was Dr. Ilker Adiguzel.

COL Kevin J. Wilson was the Commander of ERDC, and Dr. Jeffery P. Holland was the Director.

Unit Conversion Factors

| Multiply | By | To Obtain |
|---|----------------|----------------------------|
| cubic feet | 0.02831685 | cubic meters |
| cubic inches | 1.6387064 E-05 | cubic meters |
| cubic yards | 0.7645549 | cubic meters |
| degrees Fahrenheit | $(F-32)/1.8$ | degrees Celsius |
| feet | 0.3048 | meters |
| gallons (US liquid) | 3.785412 E-03 | cubic meters |
| horsepower (550 foot-pounds force per second) | 745.6999 | watts |
| inches | 0.0254 | meters |
| pounds (mass) | 0.45359237 | kilograms |
| pounds (mass) per cubic foot | 16.01846 | kilograms per cubic meter |
| pounds (mass) per cubic inch | 2.757990 E+04 | kilograms per cubic meter |
| pounds (mass) per square foot | 4.882428 | kilograms per square meter |
| pounds (mass) per square yard | 0.542492 | kilograms per square meter |
| square feet | 0.09290304 | square meters |
| square inches | 6.4516 E-04 | square meters |
| yards | 0.9144 | meters |

1 Introduction

1.1 Background

The need to develop minimum product property sets was presented at National Institute of Building Sciences meetings in 2007 by Mr. Kalin, President Kalin and Associates, and Dr. East, Engineer Research and Development Center, Construction Engineering Research Laboratory (East 2010). To support this effort, the Specifiers' Properties information exchange (SPie, pronounced "spy") project was initiated by the buildingSMART alliance, a Council of the National Institute of Building Sciences. The SPie project has undergone several iterations of engagement with United States design and manufacturing sectors. While providing successful demonstrations of the concepts needed to implement SPie, these efforts have not been successful in developing a national standard for minimum BIM object properties.

1.2 Objective

The objective of this project was to develop a proposed minimum specification for Building Information Model (BIM) objects. To determine if this effort is successful the following criteria must be considered. First, is the source of the specification derived from authoritative sources? Second, is the expected use of the specification consistent with professional practice? Third, can existing publication mechanism for the exchange of the specified information be employed at no additional cost to all parties?

1.3 Approach

1. A catalog of the United States federal government's Unified Facility Guide Specifications (UFGS) (WBDG 2012) containing objects commonly found in BIM software was created.
2. For each relevant UFGS sections the list of products for each commonly found BIM object was compiled.
3. Specific UFGS-required properties for each of the products were cataloged as the UFGS properties.
4. Standard heading information for all product properties were added to the UFGS property templates.

5. Industry practice that identifies product selection criteria found in product and equipment schedules were added from the internationally reviewed COBie Guide (East 2012).
6. The complied specification of minimum product properties was compiled into this report.

2 Authoritative Sources

Two authoritative sources were used to create the SPie templates published in this report. The first was the Unified Facilities Guide Specifications (WBDG 2012) and the second was The COBie Guide (East 2012).

2.1 Unified Facilities Guide Specifications

The UFGS consists of 700 sections and over 21,000 pages. The content of these sections were reviewed to identify those sections whose products, materials, and/or equipment are commonly found as objects in BIM modeling software. Based on this review the following specification sections were identified as relevant to this project:

Table 1. UFGS Sections Included in SPie.

DIVISION 03 - CONCRETE
DIVISION 04 - MASONRY
DIVISION 05 - METALS
DIVISION 06 - WOOD, PLASTICS, & COMPOSITES
DIVISION 07 - THERMAL AND MOISTURE PROTECTION
DIVISION 08 - OPENINGS
DIVISION 09 - FINISHES
DIVISION 10 - SPECIALTIES
DIVISION 11 - EQUIPMENT
DIVISION 12 - FURNISHINGS
DIVISION 13 - SPECIAL CONSTRUCTION
DIVISION 14 - CONVEYING EQUIPMENT
DIVISION 21 - FIRE SUPPRESSION
DIVISION 22 - PLUMBING
DIVISION 23 - HEATING, VENTILATING, & AIR CONDITIONING
DIVISION 25 - INTEGRATED AUTOMATION
DIVISION 26 - ELECTRICAL
DIVISION 27 - COMMUNICATIONS
DIVISION 28 - ELECTRONIC SAFETY & SECURITY

The UFGS sections not included in this project were those less related to building assets, and those for specialized project types that would not be widely applicable.

Table 2. UFGS Sections not Included in SPie.

DIVISION 0 – PROCUREMENT & CONTRACTING REQUIREMENTS
DIVISION 1 – GENERAL REQUIREMENTS
DIVISION 2 – EXISTING CONDITIONS
DIVISION 31 – EARTHWORK
DIVISION 32 - EXTERIOR IMPROVEMENTS
DIVISION 33 - UTILITIES
DIVISION 34 - TRANSPORTATION
DIVISION 35 - WATERWAY & MARINE CONSTRUCTION
DIVISION 40 - PROCESS INTEGRATION
DIVISION 41 – MATL PROCESSING & HANDLING EQUIPMENT
DIVISION 42 - PROCESS HEATING, COOLING, & DRYING EQUIP
DIVISION 43 - PROCESS GAS & LIQUID HANDLING, & STOR EQUIP
DIVISION 44 - POLLUTION & WASTE CONTROL EQUIPMENT
DIVISION 46 - WATER & WASTEWATER EQUIPMENT
DIVISION 48 - ELECTRICAL POWER GENERATION

2.2 The COBie Guide

The COBie Guide (East 2012) is the internationally reviewed commentary that accompanies the United States National BIM Standard (NBIMS-US) version2 standard, Construction-Operations Building information exchange (COBie) specification. COBie is a specification representing managed facility assets (East 2011). COBie information is delivered during the project in a series of stages identified in the Life-Cycle information exchange (East 2009) project.

While the production and consumption of COBie data using Commercial Off The Shelf (COTS) software has been demonstrated in eleven public meetings that began in July 2008. While COBie provides the format for facility asset information, it does not specify the requirements for specific product properties.

Given the absence of a United States standard for product properties, COBie Guide was developed to provide a minimum quality standard upon which BIM deliverables, in COBie format, could be evaluated. This minimum quality standard was that BIM data for managed facility assets would exactly match that information appearing on design drawing product and equipment schedules.

Tables within the COBie Guide provide typical equipment schedules found in standard construction documents of United States government federal agencies. During 2012 the COBie Guide underwent a 90 day international review and was updated to reflect typical product properties found on standard design drawings.

The capability of design software to meet the criteria that “the data match the drawings” was publically tested at the January 2013 buildingSMART alliance Challenge (East 2013). The COBie Guide will be submitted for NBIMS-version 3 balloting as an industry “best practice.”

3 SPie Templates

3.1 Description

Following a review of the UFGS sections noted in Table 1 and a review of the related COBie Guide tables, templates were prepared for 498 individual product specifications. Each of these templates was developed from a single generic template. This generic template has four columns.

3.1.1 Column 1 - Property Name

The rows of the first column list the proposed product properties for that product. The primary interest in this catalog of product properties is to identify the properties actually published Unified Facilities Guide Specifications and COBie Guide. The merging of these properties provide the pragmatic specification that are mandated by specification and typically found on design drawing equipment and product schedules.

No attempt was made to standardize the attribute list, in part because the UFGS does not use the same terms throughout. For example, sprinklers vs sprinkler heads; underground piping components vs buried water piping systems. A complete list of all product properties is provided in Appendix A.

3.1.2 Column 2 – Authoritative Source

The second column identifies the source of the property (either UFGS or COBie Guide). All properties in these templates must be based on one of these two sources.

3.1.3 Column 3 – Typical Units of Measure

The third column identifies the typical units of measure, if applicable. Where not applicable, “n/a” was inserted for clarity and to demonstrate completeness of the template. UFGS specifications evaluated typically identified metric units. Where imperial measurement is included, both measurement systems are found in relevant UFGS sections.

Rather than being a definitive requirement for one measurement system or another, these templates provide an example of the type of measure-

ment unit that is required by providing an example. SPie templates, and the related COBie format, both require that all properties be explicitly defined by both quantum and unit.

3.1.4 Column 4 – Representative Values

Column 4 includes the value of the attributes, separated by a hyphen where multiple values are listed in the COBie Guide or in UFGS. Depending on the requirements of an individual project, one or more values could be applicable. For the referenced UFGS section, the date of publication is included after the name of the section.

3.2 Example

Table 3 provides an example of a template showing the organization of the table into the four columns.

3.3 Complete List

All of the proposed templates are captured in Appendix B.

Table 3. Example Interior Lighting Template.

| UFGS Section and Date | UFGS MAY 2012 | 26 51 00.00 40 | INTERIOR LIGHTING 02/11 |
|------------------------------|--------------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 | Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide/UFGS 2.5/2.6 | n/a | recess - flush - suspended |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |

| UFGS Section and Date | UFGS MAY 2012 | 26 51 00.00 40 | INTERIOR LIGHTING 02/11 |
|-----------------------|----------------------|----------------|--|
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide/UFGS 1.8 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | interior lighting |
| Lamp Type | UFGS 2.2/2.3/2.4 | n/a | fluorescent - high-intensity-discharge - incandescent |
| Ballasts | UFGS 2.2/2.3 | n/a | T-8 - F17T8 - T-5 - F96T8 - T-8 dimming - electromagnetic - high-pressure sodium - low- pressure sodium - metal-halide |

4 Conclusions and Recommendations

4.1 Conclusions

These templates are intended to be used in both project specifications and BIM programs to document minimum product attributes. They can easily function as criteria for product data selections and design decisions.

Perhaps the highest value of the templates is as a stable starting point around which product manufacturers, specifiers, constructors and facility operators can rally. The general workflow of a project dictates that most design considerations are necessary prior to the construction documents phase and often may or may not be included in specifications. A specification rarely contains all of the information necessary for a BIM, and often there is a great deal of information that is specified but is not relevant in a BIM. The templates are organized by work results and products and should be augmented further to include the attributes necessary not just for specification, but for design, construction, and operations and maintenance. (Previous efforts to engage facility managers to define an Operators Properties information exchange (OPie) did not succeed due to the lack of community response.) Currently the templates are categorized by work result and by product. In the future, they can be further organized by phase, trade, space, or any other logical identifier.

In contrast, it is apparent that the current UFGS does not have a common template between sections, nor many of the criteria established in the new COBie Guide as required asset data. UFGS lacks the standardization and unification necessary to allow information to be managed in a database such as COBie without a considerable amount of manual effort. Unlike several other national master specification systems in use in the United States, Canada, and Great Britain, the current UFGS section structure does not lend itself to direct links between specifications and drawings, and specifications and models. As the UFGS is updated over time, and as the SpecsIntact software which is used to author sections grows in functionality, this lack-of-connectivity can surely be overcome.

It is the intention of the templates is to allow information to be captured early in a project cycle and carried from design through construction and into facilities operations and maintenance. Templates can facilitate the

homogenization of information throughout the entire project cycle and be uniformly presented in the various deliverables such as specifications, drawings and schedules. It is important to know what attributes are necessary and when they need to be available. By building a stable foundation upon these templates, the balance of the information exchange requirements can be developed in a modular as-needed fashion rather than attempting to make all project decisions concurrently.

4.2 Recommendations

Specification experts preparing updates to the UFGS should add template information within the specification structure, and expanding coordination with the templates. Future updates to UFGS should confirm that standardized language is used across sections for ease of integration with data and modeling programs. The UFGS should standardize its formatting as it likely evolves to a database driven specification which allows links between a model and its attributed references.

Contracting officers should consider requiring the templates as a project deliverable during both the design development and construction documents phases of the project.

Architects and engineers should consider integrating the templates within their project BIM models, and with their office master specifications.

Building product manufacturers should consider matching their data with the templates for ease of importing data into the model, and should consider expanding the templates with the information they need for pricing and fabrications.

Contractors should consider updating the templates during construction to streamline product procurement, and to create an as-built BIM.

Facility managers should consider updating the templates on a regular basis, either with in-house systems or with external BIM model-of-record providers.

Finally, this product catalog should become the starting point to evolve a United States library of common BIM objects.

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Appendix A: SPie Property Summary

| | |
|--|------------------------------------|
| AAMA Rating | Airspace Fill |
| Aboveground Piping Components | Alarm Initiating Devices |
| Aboveground Piping Materials | Alarm Verification |
| Aboveground Piping Systems | Alarms and Devices |
| Aboveground Piping Systems for Concentrate | Ambient Temp |
| Aboveground Piping Systems for Solution | Anchor Type |
| Accelerating Amps | Anodes |
| Accessory Material | Antennas |
| Acoustical Rating | Anti-Terrorism Performance |
| Actuation | Appearance Grade |
| Adhesive Type | Application Method |
| Adhesives | Armrest Type |
| Admixtures | Array Aperture Area |
| Age Group | Asphalt Emulsion Type |
| Aggregate | Asphalt Type |
| Aggregate Type | Astragal |
| AIC Rating | Attachment Method |
| Air Compressor | Attenuation Class |
| Air Compressors | Automatic Cleaning System |
| Air Entrainment | Automatic Temperature Control Type |
| Air Flow | AWI Quality Grade |
| Air Handling Unit Type | AWS Requirement |
| Air Handling Units | Back Material |
| Air Infiltration | Backbone Cabling |
| Air Piping and Accessories | Backer Panel |
| Air Receivers and Separators | Backer Type |
| Air Systems Equipment | Backflow Preventers |
| Air Terminal Unit Type | Backing |
| Air-Conditioner Type | Backstop |
| Airspace Depth | Ballast |
| | Ballasts |

| | |
|---------------------------------|----------------------------------|
| Base Coat | Cable |
| Base Coating Type | Cable Tray Materials |
| Base Flashing Type | Cable Trays |
| Base Material | Cable Types |
| Base Sheet Type | Cage |
| Basis-of-Design Manufacturer | Cameras |
| Basis-of-Design Model | Cap Sheet Type |
| Basis-of-Design Notes | Capacity |
| Battery Capacity | Car Door Type |
| BHMA Finish | Carrier Configuration |
| Binder Matrix | Caulking |
| Binder Type | Cavity Width |
| Bitumen Type | Ceiling Unit Pattern |
| Bituminous Plastic Cement Type | Ceiling Unit Type |
| Board Mounting | Cement Type |
| Board Size | Chemical Resistance |
| Board Type | Chilled Water Flow |
| Boiler Type | Chilled Water Rate |
| Bonding Agent | Chiller Media |
| Bonding Compound | Chiller Type |
| Breaking Load | Chip Type |
| Building Air Tightness | Churn Pressure |
| Bumpers | Cleaning Material |
| Buried Piping Systems | Cleaning Method |
| Buried Water Piping Systems | Cleanliness Level Classification |
| Burners | Cleanouts |
| Busways | Closer Type |
| Butyl Rubber Sheeting Thickness | Closing Device |
| Cab Enclosure Door Finish | Coal-Tar Pitch Type |
| Cab Enclosure Ceiling | Coating |
| Cab Enclosure Door Finish | Coating Formulation |
| Cab Enclosure Floor Finish | Coating System |
| Cab Enclosure Wall Finish | Coating Type |
| Cabinet Finish | Coatings |
| Cabinet Material | Coefficient of Thermal Expansion |
| Cabinet Type | Cohesion/Adhesion strength |

| | |
|------------------------------------|---------------------------------|
| Coil Air Pressure Drop | Consolidant Type |
| Coil Capacity | Construction |
| Coil Flow | Construction Type |
| Coil Velocity | Condensation Index |
| Coil Water Pressure Drop | Control Devices |
| Cold Water | Control Panel Type |
| Color | Controller Type |
| Communication Equipment | Controller Type |
| Communicators | Cooling Coil Delta P |
| Compartment Construction | Cooling Rows |
| Component Attachment | Cooling Towers |
| Component Category | Copper-Silver Ionization System |
| Component Class | Core Type |
| Component Construction | Corner Angles |
| Component Finish | Corrugation Height |
| Component Grade | Counterbalance Rating |
| Component Material | Cover Construction |
| Component Size | CRF |
| Component Style | Cross Ties |
| Component Thickness | Cross-sectional Area |
| Component Type | Curing Material |
| Component Usage | Current |
| Components | Curtain |
| Composite Self-Adhering Sheeting | Cushion Type |
| Compressed Air Dryer | Day Gate |
| Compressed Air System | Day Gate Type |
| Compressive Strength | Dead Load |
| Compressor Cooling Water Flow Rate | Deck Coating |
| Concentrated Load | Deck Material |
| Concrete Class | Deck Type |
| Concrete Insert Type | Decking Type |
| Condensation Resistance Factor | Deflection |
| Condensers | Density of Application of Water |
| Conduit and Fittings | Description |
| Connection | Design Load |
| Connection Type | Design Pressure |

| | |
|------------------------------|-----------------------------------|
| Desiccant System | Dry Density |
| Detection Alarms | Dry-Pipe Maintenance Air |
| Detection Coverage | Duct Applications |
| Detection Systems | Duct Insulation |
| Detectors | Duct Systems |
| Discharge Capacity | Duty Rating |
| Divider Material | Efficiency |
| Domestic Water Service Meter | Efficiency at Head Capacity |
| Door Actuation | Egress Door |
| Door Construction | Electric Field Attenuation |
| Door Core | Electric Interference Attenuation |
| Door Count | Electrical Components |
| Door Designation | Electrical Resistance |
| Door Exterior Covering | Electrical Work |
| Door Fabric | Electrode Type |
| Door Facing | Electromatic Attenuation |
| Door Finish | Elevator Operation |
| Door Height | Elevator Service |
| Door Interior Covering | Elevator Type |
| Door Material | Elongation |
| Door Operating Force | Emergency Recovery Devices |
| Door Operation | Emissions |
| Door Position Switch Type | Enclosure Rating |
| Door Stop Type | Enclosures |
| Door Style | Energy Efficiency Ratio (EER) |
| Door Thickness | Energy Source |
| Door Type | Entering Air Temp DB |
| Door Type, Custom | Entering Air Temp WB |
| Door Type, Standard | Entering Water Temp |
| Door Width | Entering Water Temperature |
| Drain | Epoxy Binder Type |
| Drains | Epoxy Grout Type |
| Drains and Backwater Valves | Epoxy Resin |
| Drawer Count | Equip Ground Bus |
| Drive | Equipment Capacity |
| Drive Control Type | Equipment Type |

| | |
|---------------------------------|-------------------------------|
| Evaporative Cooler Type | Fire Department Connections |
| Examination Level | Fire Detecting Devices |
| Exit Static Pressure | Fire Label Rating |
| Expansion Joint Filler Material | Fire Protection System |
| Exterior Door Finish | Fire Pump Operation |
| Extinguisher Type | Fire Rated |
| Fabric Weight | Fire Rating |
| Face Dimensions | Fire Resistance Rating |
| Facer | Fittings and Accessories |
| Facing Aggregate Type | Fixture Type |
| Fan Ext Pressure Drop | Fixtures |
| Fan Flow - Maximum | Flame Resistance |
| Fan Flow - Nominal | Flame Spread |
| Fan Motor Power | Flame Spread Rating |
| Fan Outside Flow | Flange Width |
| Fan Sound Level | Flashing Material |
| Fan Speed | Flashing Type |
| Fan Type | Flexural Modulus |
| Fastening method | Flexural Modulus-Full Section |
| Felt Underlayment | Flexural Strength |
| FF Designation | Floor Covering |
| Fiber Optic Cabling | Floor System Type |
| Fiber Type | Floor Type |
| Fiber Volume Fraction | Flooring Finish |
| Fibrous Asphalt Type | Flooring Grade |
| Filler Type | Flooring Material |
| Film Thickness | Flooring Thickness |
| Filter Rating | Flooring Type |
| Filter Type | Flooring Unit Dimensions |
| Filter Types | Flow Rate |
| Finish | Fluid-Applied Membrane Type |
| Finish Category | Form Liner Type |
| Finish Coat | Form Material |
| Finish Flooring | Form Type |
| Finish Type | Frame Finish |
| Fire Classification | Frame Head |

| | |
|------------------------|-------------------------------------|
| Frame Jam | Glazing Type |
| Frame Material | Gloss Level |
| Frame Material | Grade |
| Frame Sill | Grid System |
| Frame Style | Grit Type |
| Frame Type | Grounding Components |
| Framing Grade | Grounding Method |
| Framing Members | Grout Coating Type |
| Free Swell Rating | Grout Compressive Strength |
| Frequency | Grout Flow |
| Frequency | Grout Type |
| FRP Strengthening | Gypsum Backing Board |
| Fuel Burning Equipment | Gypsum Base |
| Fuel Contributed | Handle Type |
| Fuel Type | Hardware Finish |
| Fuel Type | Hardware Item Category |
| Function | Hardware Item Grade |
| Furnace Type | Hardware Item Type |
| Furnaces | Hardware Material |
| Furniture System Type | Hardware Set |
| Gas Piping | Hardware Type |
| Gas Systems | Heading |
| Gas Velocity | Healthcare Code Criteria |
| General Components | Heat Detectors |
| Generation Interval | Heat Pump Type |
| GFCI | Heat Reclaim |
| Glass Class | Heat Released |
| Glass Condition | Heaters |
| Glass Kind | Heating and Cooling Equipment Type |
| Glass Quality | Height Adjustment Range |
| Glass Type | Hinge Type |
| Glazing Assembly Type | Hood |
| Glazing Color | Horizontal Bus Current |
| Glazing Compound | Horizontal Lateral Force Resistance |
| Glazing Material | Horizontal Load |
| Glazing Method | Hot Water |

| | |
|---------------------------------------|-----------------------------------|
| Hot-Water Storage Tanks | Lamp Type |
| Humidifier Type | Lamps |
| Hydraulic Design Discharge Density | Latching |
| Illuminated | Lath Type |
| Impact Load | Lath Weight |
| Impact Resistance | Lead Thickness |
| Impact Resistant | Leaving Air Temp DB |
| Inner Panel Material | Leaving Air Temp WB |
| Input Power | Leaving Water Temp |
| Install Method | Leaving Water Temperature |
| Insulating Cement | Lens Type |
| Insulation Materials | Lifting Device Type |
| Insulation Thermal Resistance | Light Path |
| Insulation Type | Light Reflectance Coefficient |
| Integrated Part-Load Value (IPLV) | Lighting and Navigation Aids |
| Interceptors | Lighting Control |
| Interior Door Finish | Lining |
| Interior Noise Level | Lining Materials |
| Interior Sensors | Live Load |
| Intermediate Coat | Location |
| Intermediate Coat Type | Lock Type |
| Interply Sheet Type | Locking Device |
| Intrusion Detection System Subsystems | Locking Mechanism |
| Isolated Ground Bus | Logical Class |
| Isolator Types | Louver Finish |
| Jacketing | Louver Material |
| Jamb Guides | Louver NFVA |
| Joinery Method | Louver Type |
| Joint Material | Luminaire Controls |
| Joint Reinforcement | Luminaire Light Source |
| Joint Type | Luminaires |
| Keying System | Machine Room Heat Load |
| Ladder Cage | Magnetic Interference Attenuation |
| Ladder Finish | Main Breaker Mounting |
| Lamp Count | Main Bus Current |
| Lamp Power | Manual Valves |

| | |
|---------------------------------|------------------------------------|
| Mat Thickness | Motor Controller |
| Mat Type | Motor Types |
| Mat Usage | Mounting |
| Material | Mounting |
| Material Classification | Mounting Height |
| Material Thickness | Mounting Method |
| Materials | Name |
| Maximum Aggregate Size | Naval Equipment Symbol |
| Maximum Deflection | Net Compressed Air Output |
| Maximum Flow Rate | Neutral Bus |
| Maximum Power Output | NFVA |
| Maximum Sphere Size Ejection | Noise Level |
| Maximum Water-Cement Ratio | Noise Reduction |
| Membrane Fabric | Noise Reduction Coefficient |
| Membrane Protection | Noise Reduction Coefficient Range |
| Membrane Thickness (Wet) | Nominal Panel Size |
| Membrane Type | Non-Destructive Examination Method |
| Mesh Gage | Notification Appliances |
| Metal Type | Notification Devices |
| Metallic Waterproofing Compound | Number of Hoist Way Openings Front |
| Metallizing Wire Type | Number of Hoist Way Openings Rear |
| Metalwork | Number of Panes |
| MG Motor Power | Number of Poles |
| Minimum Bus Bracing | Number of Stops |
| Minimum Oven Dry Density | Number of Wires |
| Miscellaneous Materials | OCCS Table 23 Properties |
| Miscellaneous Piping Items | Opening Provisions |
| Mix Design | Operating Cycles |
| Module Capacity | Operating Temperature |
| Modules | Operating Weight |
| Modulus of Elasticity | Operation |
| Moisture Content | Operation Force |
| Moisture Vapor Transmission | Operation Speed |
| Mortar Compressive Strength | Output Media |
| Mortar Type | Output Power |
| Motor Components | Overhead Drum |

| | |
|-------------------------------------|------------------------------------|
| Packing | Ply Sheet Type |
| Paint Formula | Ply Thickness |
| Panel Construction | Pole Windload Design |
| Panel Finish | Poles |
| Panel Height | Pool Water Safety Vacuum Release |
| Panel Insulation | Portland Cement Type |
| Panel Insulation Type | Power |
| Panel Material | Power Connection Stations |
| Panel System Type | Pozzalan Type |
| Panel Thickness | Predecorated |
| Panel Type | Preservative Treatment |
| Panel Width | Pressure Drop |
| Partition Covering | Pressure Valves |
| Partition Material | Pressurization |
| Partiton Type | Prestressing Component |
| Passes | Primary Electrical Characteristics |
| Pattern | Primer |
| Peel Strength | Primer Type |
| Percent Solids | Proportioning |
| Performance Class | Protection |
| Personnel Door | Protection Method |
| Phase | Protective Coating |
| Phase | Pump Design Operating Point |
| Pick-Up Insert Type | Pump Impeller Type |
| Pipe and Fittings | Pump Motor Type |
| Pipe Hangers, Inserts, Supports | Pump Operating Speed |
| Pipe Insulation | Pump Service |
| Pipe Insulation Material | Pump Type |
| Pipe Joint Materials | Pumps |
| Piping | Radiant Flux |
| Piping Specialties | Radio Devices |
| Piping Type | Rail Construction |
| Placement | Rail Diameter |
| Plane Wave Attenuation | Rail Finish |
| Plane Wave Interference Attenuation | Range of Slump |
| Plumbing Fixtures | Rapid Hardening Repair Material |

| | |
|--------------------------------|--------------------------------------|
| Rated Capacity | SCR HP Rating |
| Rated Flow | Screen Material |
| Rated Flow | Sealant Compound |
| Rated Load | Sealant Type |
| Rated Speed | Sealer |
| Rating | Sealer pH |
| Reception Equipment | Sealer Type |
| Reference Electrodes | Seaming Method |
| Refrigerant Type | Secondary Electrical Characteristics |
| Refrigeration System | Security Code |
| Reinforcement | Sensible Capacity |
| Reinforcement Material | Servers |
| Reinforcement Type | Shade Type |
| Reinforcing | Shading Coefficient |
| Reinforcing Material | Shear Modulus-Transverse |
| Release Agent | Shear Strength |
| Repair Material | Sheathing Board |
| Residual Pressure at Discharge | Sheathing Type |
| Resilient Base Type | Sheet Material |
| Resin Type | Shielded |
| Restraining Device | Shielding Attenuation |
| Riser Alarm Equipment | Shingle Type |
| Riser Type | Short Beam Shear |
| Rock Shield | Short Circuit Interrupting Rating |
| Rolling Load | Shower Pans |
| Roof Panel Material | Shutter Type |
| Roof Panel Profile | Sign Finish |
| Roof Panel Type | Sign Material |
| Roof Panel Yield | Sign Mounting |
| Roof Type | Sign Type |
| Room Size | Signal Stations |
| Room Style | Slab Edge Type |
| Room Type | Slat Size |
| Runout Inlet Size | Slate Type |
| Runout Outlet Size | Smoke Density |
| Sanitary Fixture Water | Smoke Developed |

| | |
|-------------------------------|--------------------------------------|
| Smoke Development | Surface Type |
| Smoke Sensors | Surfacing |
| Snow Load | Surfacing Material |
| Solar Collector Construction | Suspension System |
| Solar Heat Gain Coefficient | Sustainability |
| Solution Application Density | System Capacity |
| Sound Absorbing Material | System Cleaning Materials |
| Sound Absorption | System Components |
| Sound Attenuation | System Description |
| Space Heater Type | System Design |
| Span Rating | System Dry Film Thickness |
| Species/Type | System Equipment |
| Speed | System Type |
| Sprinkler Heads | Tackboard Covering |
| Sprinkler System Design | Tape |
| Sprinklers | Telecommunications Cable Support |
| Stair Framing Type | Temperature Control Type |
| Standard Material | Temperature Range |
| Starting Amps | Temperature Valves |
| Static Control | Tensile Modulus |
| Static Design Resistance | Tensile Modulus of Elasticity |
| Steel Conformance | Tensile Strength |
| Steel Grade | Terminal Units |
| Steel Shape | Texture |
| Steel Type | Thermal Performance |
| Stile Width | Thermal Resistance |
| Stressing Tendon Type | Thermoplastic PVC Membrane Thickness |
| Structural Performance | Thickness |
| Subpurlin Type | Threat Level |
| Subsystems | Threshold Material |
| Support System | Tile Class |
| Surface Abrasion | Tile Thickness |
| Surface Evaporation Retardant | Tile Type |
| Surface Hardener | Top Coating Type |
| Surface Pattern | Topcoat Type |
| Surface Raceways | |

| | |
|----------------------------------|-------------------------------|
| Topping Material | Vacuum Systems |
| Total Capacity | Valve Material |
| Total Lead Equivalent Protection | Valves |
| Toughness Index | Valves |
| Transmitters | Vanity Type |
| Trap Primer Assemblies | Vanity Width |
| Traps | Vapor Retarder |
| Travel Length | Vent |
| Tread Type | Vent Diameter |
| Tubing Diameter | Ventilator Materials |
| Tuft Bind | Ventilator Type |
| Type | Vertical Bus Current |
| Type of Support | Vibration Isolation Bases |
| U Value | Vibration Isolation Mountings |
| U-Factor | Vision Panels |
| UFGS Section and Date | Visual Defects |
| Underground Piping Components | VOC Limit |
| Underground Piping Materials | Void Retainer Type |
| Underground Piping Systems | Voltage |
| Underlayment | Voltage |
| Uniform Load | Wall Liner |
| Unit Composition | Wall Location |
| Unit Heater and Ventilator Type | Wall Panel Core |
| Unit Heater Type | Wall Panel Profile |
| Unit Stress E | Wall Panel Type |
| Unit Stress Fb | Wall Panel Yield |
| Unit Stress Fc | Wallcovering Type |
| Unit Stress Ft | Waste |
| Unit Stress Fv | Waste Reduction |
| Unit Stress Rating | Water Absorption |
| Unit Type | Water Flow |
| Unitary Air Conditioner Type | Water Flow |
| Unloaded Compressor Horsepower | Water Hardness Effluent |
| Unloading Steps | Water Hardness Influent |
| Upholstery Material | Water Heaters |
| Upholstery Weave | Water Infiltration |

| | |
|-------------------------------|----------------------------|
| Water Inlet | Window Finish |
| Water Penetration | Window Material |
| Water Pressure Booster System | Window Number |
| Water Repellent | Window Operation |
| Water Treatment | Window Rating |
| Water Vapor Permeance | Window Size - Height |
| Waterstop Type | Window Size - Length |
| Weave | Window Size - Width |
| Welding Method | Window Type |
| Wheel Assembly | Wire Line Cabling |
| Wind Load | Wire Rope and Fitting Type |
| Wind Loads | Wire Tie Type |
| Wind Uplift Resistance | Wood Consolidant Type |
| Wind Uplift Resistance Class | Working Pressure |
| Window Category | X-Ray Resistant |

Appendix B: Proposed SPie Templates

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 03 01 30.71 | CONCRETE REHABILITATION 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Epoxy Binder Type | UFGS 2.1.1.1 | n/a | Insert type, grade, class |
| Epoxy Grout Type | UFGS 2.1.1.2 | n/a | Insert type, grade, class |
| Aggregate | UFGS 2.1.2 | n/a | no.8 sieve - no.40 sieve |
| UFGS Section and Date | UFGS MAY 2012 | 03 01 30 | RESTORATION OF CONCRETE IN HISTORIC STRUCTURES 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 27 13 15 | Masonry Restoration and Cleaning Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Cement Type | UFGS 2.1.4.1 | n/a | Type I - type II - low -alkalai |
| Pozzolan Type | UFGS 2.1.4.2 | n/a | Class C - Class F |
| Epoxy Grout Type | UFGS 2.1.15 | n/a | I - II |
| UFGS Section and Date | UFGS MAY 2012 | 03 01 32 | CONCRETE REHABILITATION FOR CIVIL WORKS 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 27 13 13 15 | Concrete Rehabilitation Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Mortar Compressive Strength | UFGS 1.5.1 | kPa | Insert Value |

| Attribute | Source | Unit | Value |
|---------------------------------|--------------|------|---|
| Grout Compressive Strength | UFGS 1.5.1 | kPa | Insert Value |
| Rapid Hardening Repair Material | UFGS 2.1.1.1 | n/a | type R1 - type R2 - type R3 |
| Aggregate | UFGS 2.1.2 | n/a | no.8 sieve - no.40 sieve - insert value |
| Reinforcement | UFGS 2.1.5 | n/a | polypropylene - steel |
| Epoxy Binder Type | UFGS 2.7.1 | n/a | Insert type, grade, class |
| Epoxy Grout Type | UFGS 2.7.1 | n/a | Insert type, grade, class |

| UFGS Section and Date | UFGS MAY 2012 | 03 11 13.00 10 | STRUCTURAL CAST-IN-PLACE CONCRETE FORMING 08/10 |
|------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 17 | Concrete Formwork |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Finish Type | UFGS 2.1 | n/a | class A - class B - class C - class D |
| Void Retainer Type | UFGS 2.2 | n/a | polystyrene - precast concrete |

| UFGS Section and Date | UFGS MAY 2012 | 03 11 19.00 10 | INSULATING CONCRETE FORMING 02/12 |
|------------------------------|----------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 17 17 | Insulated Concrete Forms |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | reduced emissions - regional - recycled content |
| Cavity Width | UFGS 2.2.2 | mm | 100 - 150 - 200 - 250 - 300 |
| Thermal Resistance | UFGS 2.2.2 | R | 22 - 16 - 14 |
| Sound Attenuation | UFGS 2.2.2 | STC | 50 |
| Form Material | UFGS 2.3 | n/a | expanded polystyrene, type II |
| Cross Ties | UFGS 2.3 | n/a | plastic - metal |

| UFGS Section and Date | UFGS MAY 2012 | 03 15 00.00 10 | CONCRETE ACCESSORIES 08/10 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 21 | Reinforcement and Prestressing Components |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|----------------|--------------|------|--|
| Sustainability | COBie Guide | n/a | insert reqts |
| Component Type | UFGS 2.1/2.2 | n/a | contraction joint strip - expansion joint filler |
| Sealant Type | UFGS 2.3 | n/a | preformed polychloroprene elastomeric - field molded type T - field molded type NT - hot applied type I - hot applied type II - hot applied type III |
| Waterstop Type | UFGS 2.4 | n/a | flexible metallic - rigid metallic - non-metallic - non-metallic hydrophylic - preformed elastomeric |

| UFGS Section and Date | UFGS MAY 2012 | 03 20 00.00 10 | CONCRETE REINFORCING 08/10 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 21 | Reinforcement and Prestressing Components |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Reinforcement Type | UFGS 2.1-2.4 | n/a | dowel - bar mat - bar - fabric |
| Reinforcement Material | UFGS 2.1-2.4 | n/a | galvanized steel - epoxy coated steel - polypropylene |
| Wire Tie Type | UFGS 2.5 | n/a | galvanized steel - epoxy coated steel - vinyl coated steel |

| UFGS Section and Date | UFGS MAY 2012 | 03 23 00 | STEEL STRESSING TENDONS AND ACCESSORIES FOR PRESTRESSED CONCRETE 11/09 |
|------------------------------|---------------|----------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 | Other Special Foundations |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Stressing Tendon Type | UFGS 2.1.1 | n/a | Seven-Wire Stress-Relieved Strand, Grade 250 - Seven-Wire Stress-Relieved Strand, Grade 270 - Stress-Relieved Wire - Steel Bar |
| Grout Type | UFGS 2.1.2 | n/a | type I - type II |

| UFGS Section and Date | UFGS MAY 2012 | 03 30 00.00 10 | CAST-IN-PLACE CONCRETE 11/10 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|----------------------|-------------|------|--|
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Surface Type | UFGS 1.4.10 | n/a | bullfloated - straightedged - float finish - trowel finish - very flat (FF) |
| FF Designation | UFGS 1.4.10 | n/a | Insert Value |
| Compressive Strength | UFGS 1.4.11 | Mpa | 35 - 27.5 - 20 |
| Flexural Strength | UFGS 1.4.11 | Mpa | 4.5 |
| Cement Type | UFGS 2.1.1 | n/a | portland type I - portland type II - portland type III - portland type V - IP - IP(MS) - IP(MH) - IS - IS(MS) - IS(MH) - pozzalan class c - pozzalan class F - GGBF Slag - silica fume |
| Aggregate | UFGS 2.2 | n/a | insert reqts |
| Admixtures | UFGS 2.3 | n/a | air-entraining - accelerating - water-reducing - surface retarder - expanding |

| UFGS Section and Date | UFGS MAY 2012 | 03 30 00 | CAST-IN-PLACE CONCRETE 11/11 |
|------------------------------|----------------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.8 | n/a | regional - recycled content |
| Form Type | UFGS 2.1 | n/a | wood - plywood - plastic - carton - steel |
| Mix Design | UFGS 2.3 | n/a | contractor-furnished |
| Compressive Strength | UFGS 2.3 | MPa | 35 - 27.5 - 20 |
| Range of Slump | UFGS 2.3 | n/a | Insert Value |
| Maximum Water-Cement Ratio | UFGS 2.3 | n/a | Insert Value |
| Air Entrainment | UFGS 2.3 | n/a | Insert Value |
| Cement Type | UFGS 2.4.1 | n/a | portland type I - portland type II - portland type III - portland type V - IP - IP(MS) - IP(MH) - IS - IS(MS) - IS(MH) - pozzalan class c - pozzalan class F - GGBF Slag - silica fume |
| Aggregate | UFGS 2.4.3 | n/a | insert reqts |
| Reinforcement Type | UFGS 2.5 | | dowel - bar mat - bar - fabric |
| Concrete Class | UFGS 2.8 | n/a | 3A - 3N - 4A - 4N - 2.5A - 2.5N - 5A - 5N |

| UFGS Section and Date | UFGS MAY 2012 | 03 30 53 | MISCELLANEOUS CAST-IN-PLACE CONCRETE 04/08 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |

| Attribute | Source | Unit | Value |
|----------------------|------------|------|--|
| Cement Type | UFGS 2.1.1 | n/a | portland type I - portland type II - portland type III - portland type V - IP - IP(MS) - IP(MH) - IS - IS(MS) - IS(MH) - pozzalan class c - pozzalan class F - GGBF Slag - silica fume |
| Aggregate | UFGS 2.1.2 | n/a | insert reqts |
| Admixtures | UFGS 2.1.3 | n/a | air-entraining - accelerating - water-reducing - retarding |
| Compressive Strength | UFGS 2.2 | MPa | 34.5 - 20 |
| Reinforcement Type | UFGS 2.3 | n/a | bars - fabric |
| Form Type | UFGS 2.4 | n/a | wood - plywood - plastic - steel |

| UFGS Section and Date | UFGS MAY 2012 | 03 31 01.00 10 | CAST-IN-PLACE STRUCTURAL CONCRETE FOR CIVIL WORKS 11/10 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Air Entrainment | UFGS 1.3.1 | n/a | Insert Value |
| Range of Slump | UFGS 1.3.2 | n/a | Insert Value |
| Compressive Strength | UFGS 1.3.5 | MPa | 35 - 27.5 - 20 |
| Maximum Water-Cement Ratio | UFGS 1.3.6 | n/a | Insert Value |
| Surface Type | UFGS 1.4.10 | n/a | bullfloated - straightedged - float finish - trowel finish - very flat (FF) |
| FF Designation | UFGS 1.4.10 | n/a | Insert Value |
| Cement Type | UFGS 2.1.1 | n/a | portland type I - portland type II - portland type III - portland type V - IP - IP(MS) - IP(MH) - IS - IS(MS) - IS(MH) - pozzalan class c - pozzalan class F - GGBF Slag - silica fume |
| Maximum Aggregate Size | UFGS 2.1.2 | sieve | Insert Value |
| Admixtures | UFGS 2.1.3 | n/a | air-entraining - accelerating - water-reducing - retarding |

| UFGS Section and Date | UFGS MAY 2012 | 03 31 29 | MARINE CONCRETE 02/10 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Cement Type | UFGS 2.1 | n/a | portland type I - portland type II - portland type III - portland type V - IP - IS - pozzalan class F - GGBF Slag - silica fume |
| Maximum Aggregate Size | UFGS 2.2 | sieve | Insert Value |

| Attribute | Source | Unit | Value |
|--------------------|----------|------|---|
| Admixtures | UFGS 2.4 | n/a | air-entraining - accelerating - water-reducing - retarding - air-entraining |
| Form Type | UFGS 2.6 | n/a | wood - plywood - plastic - steel |
| Reinforcement Type | UFGS 2.7 | n/a | prestressing steel - bar - fabric |

| UFGS Section and Date | UFGS MAY 2012 | 03 33 00 | CAST-IN-PLACE ARCHITECTURAL CONCRETE 11/09 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Aggregate Type | UFGS 2.1.1 | n/a | Insert Value |
| Reinforcing | UFGS 2.1.2 | n/a | Galvanized Steel |
| Sealer | UFGS 2.1.7 | n/a | methyl methacrylate polymer acrylic emulsion, clear |

| UFGS Section and Date | UFGS MAY 2012 | 03 35 00.00 10 | CONCRETE FINISHING 11/10 |
|------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 23 | Concrete Finishing Product |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Topping Material | UFGS 2.1 | n/a | light reflective - spark resistant - static disseminating |
| Bonding Compound | UFGS 2.2 | n/a | |
| Epoxy Resin | UFGS 2.3 | n/a | type III grade I - type III, grade II |
| Finish Category | UFGS 3.1 | n/a | class A - class B - class C - class D |
| Finish Type | UFGS 3.1 | n/a | smooth - grout-cleaned - textured - exposed coarse-aggregate - sandblast - tooled |

| UFGS Section and Date | UFGS MAY 2012 | 03 37 00 | PREPLACED-AGGREGATE CONCRETE 11/09 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |

| Attribute | Source | Unit | Value |
|----------------------------|------------|-------|---|
| Compressive Strength | UFGS 2.1.1 | MPa | 34.5 - 27.6 - 20.7 - 17.2 |
| Cement Type | UFGS 2.2.1 | n/a | portland type I - portland type II - pozzalan class c - pozzalan class F - pozzalan class N - GGBF Slag |
| Maximum Aggregate Size | UFGS 2.2.2 | sieve | Insert Value |
| Admixtures | UFGS 2.2.3 | n/a | air-entraining - grout fluidifier - water-reducing - retarding |
| Maximum Water-Cement Ratio | UFGS 2.3 | n/a | Insert Value |
| Air Entrainment | UFGS 2.3 | n/a | Insert Value |
| Grout Flow | UFGS 2.3 | n/a | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 03 37 13 | SHOTCRETE 11/09 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Compressive Strength | UFGS 1.3.2 | MPa | 35 - 27.5 - 20 |
| Flexural Strength | UFGS 1.3.3 | Mpa | 4.5 |
| Toughness Index | UFGS 1.3.4 | n/a | I10 - I20 |
| Cement Type | UFGS 2.1.1 | n/a | portland type I - portland type II - portland type III - portland type V - IP (MS) - IS - pozzalan class F - GGBF Slag - silica fume |
| Maximum Aggregate Size | UFGS 2.1.2 | sieve | Insert Value |
| Admixtures | UFGS 2.1.4 | n/a | insert value - accelerating - none |

| UFGS Section and Date | UFGS MAY 2012 | 03 37 23 | ROLLER-COMPACTED CONCRETE FOR MASS CONCRETE CONSTRUCTION 11/09 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Cement Type | UFGS 2.1.1 | n/a | portland type I - portland type II - portland type III - portland type V - pozzalan class c - pozzalan class F - GGBF Slag |
| Admixtures | UFGS 2.1.2 | n/a | air-entraining - water-reducing |
| Aggregate Type | UFGS 2.1.4 | n/a | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 03 37 29 | CONCRETE FOR CONCRETE CUTOFF WALLS 11/09 |
|--------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|------|--|
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Cement Type | UFGS 2.2.1 | n/a | portland type I - portland type II - pozzalan class c - pozzalan class F - GGBF Slag |
| Aggregate Type | UFGS 2.2.2 | n/a | Insert Value |
| Admixtures | UFGS 2.2.3 | n/a | air-entraining - accelerating - flowing concrete |

| UFGS Section and Date | UFGS MAY 2012 | 03 39 00.00 10 | CONCRETE CURING 11/10 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Curing Material | UFGS 2.1 | n/a | impervious sheet - Membrane-Forming Compound - burlap and cotton mat |

| UFGS Section and Date | UFGS MAY 2012 | 03 40 00.00 10 | PLANT-PRECAST CONCRETE PRODUCTS FOR BELOW GRADE CONSTRUCTION 08/06 |
|------------------------------|------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 15 | Precast Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Compressive Strength | UFGS 1.2.5 | MPa | 35 - 27.5 - 20 |
| Maximum Water-Cement Ratio | UFGS 1.2.5 | n/a | Insert Value |
| Air Entrainment | UFGS 1.2.5 | n/a | Insert Value |
| Cement Type | UFGS 2.1.1-2.1.4 | n/a | portland type I - portland type II - portland type III - portland type V - pozzalan class C - pozzalan class F - GGBF Slag |
| Aggregate Type | UFGS 2.1.6 | n/a | Insert Value |
| Admixtures | UFGS 2.1.7 | n/a | air-entraining - accelerating - retarding - water reducing - pigment |
| Reinforcing | UFGS 2.1.8 | n/a | bar - wire - fabric |
| Reinforcing Material | UFGS 2.1.8 | n/a | billet steel - low alloy steel - galvanized steel - polypropylene |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 03 41 16 | PRECAST CONCRETE SLABS (MAX. SPAN 8'-0" O.C.) 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 15 | Precast Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Component Type | UFGS 2.3 | n/a | roof slab - curb unit |
| Slab Edge Type | UFGS 2.3 | n/a | tongue and groove on sides and ends - tongue and groove on sides, square on ends |
| Compressive Strength | UFGS 2.3.5 | MPa | 20 |
| Maximum Aggregate Size | UFGS 2.3.5 | mm | 9.5 |
| Air Entrainment | UFGS 2.3.5 | n/a | 6 to 10 percent |
| Range of Slump | UFGS 2.3.5 | mm | 75 |
| UFGS Section and Date | UFGS MAY 2012 | 03 41 33 | PRECAST STRUCTURAL PRETENSIONED CONCRETE 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 15 | Precast Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Design Load | UFGS 1.6.2 | n/a | Insert Value |
| Compressive Strength | UFGS 2.1.1 | MPa | 34.5 |
| Maximum Aggregate Size | UFGS 2.1.1 | mm | 19 |
| Maximum Water-Cement Ratio | UFGS 2.1.1 | n/a | 16 liter per 42.5 kg sack of cement |
| Air Entrainment | UFGS 2.1.1 | n/a | 4 to 8 percent |
| Range of Slump | UFGS 2.1.1 | mm | 75 |
| Aggregate Type | UFGS 2.2.1/2.2.2 | n/a | Insert Value |
| Cement Type | UFGS 2.2.3-2.2.5 | n/a | portland type I - portland type II - portland type III - portland type V - pozzalan class C - pozzalan class F - GGBF Slag |
| Admixtures | UFGS 2.2.6 | n/a | air-entraining - none |
| Reinforcing | UFGS 2.3 | n/a | bar - wire - fabric |
| Reinforcing Material | UFGS 2.3 | n/a | billet steel - low alloy steel - galvanized steel - polypropylene |
| Prestressing Component | UFGS 2.4 | n/a | strand tendons - wire tendons - steel bar tendons |
| UFGS Section and Date | UFGS MAY 2012 | 03 45 00 | PRECAST ARCHITECTURAL CONCRETE 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 15 | Precast Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|-------------|---|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Mix Design | UFGS 2.2 | n/a | contractor-furnished - exposed to view mixture - backing mixture |
| Mix Design | UFGS 2.2 | n/a | contractor-furnished |
| Aggregate | UFGS 2.3.1-2.3.3 | n/a | insert reqts |
| Cement Type | UFGS 2.3.4-2.3.6 | n/a | portland type I - portland type II - IP(MS) - IS(MS) - pozzalan class C - pozzalan class F - pozzalan class N - GGBF Slag |
| Admixtures | UFGS 2.3.7 | n/a | air-entraining - none |
| Reinforcement Type | UFGS 2.3.9 | n/a | bar - fabric |
| Prestressing Component | UFGS 2.3.10 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 03 45 33 | PRECAST[PRESTRESSED] STRUCTURAL CONCRETE 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 15 | Precast Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Mix Design | UFGS 2.1 | n/a | contractor-furnished |
| Compressive Strength | UFGS 2.1 | MPa | 35 |
| Cement Type | UFGS 2.2.1/2.2.2 | n/a | portland type I - portland type II - portland type III - pozzalan class C - pozzalan class F - pozzalan class N - GGBF Slag - silica fume |
| Aggregate | UFGS 2.3.1-2.3.3 | n/a | insert reqts |
| Admixtures | UFGS 2.3.7 | n/a | air-entraining - water reducing |
| Reinforcement Type | UFGS 2.3.9 | n/a | bar - fabric |
| Prestressing Component | UFGS 2.3.10 | n/a | 7 wire strand - single wire - steel bar |
| Finish | UFGS 2.3.6 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 03 47 13 | TILT-UP CONCRETE 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 33 25 | Precast Modules |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|-----------------------|------------------|------|---|
| Sustainability | COBie Guide | n/a | insert reqts |
| Release Agent | UFGS 2.1 | n/a | Resin Type - Paraffin Type |
| Accessory Material | UFGS 2.2.1-2.2.5 | n/a | corrosion resistant steel - galvanized steel |
| Pick-Up Insert Type | UFGS 2.2.1 | n/a | single - double |
| Lifting Device Type | UFGS 2.2.5 | n/a | angle - swivel |
| Facing Aggregate Type | UFGS 2.3 | n/a | gravel - limestone - quartz - marble - glass - ceramic |
| Admixtures | UFGS 2.6 | n/a | retarder - accelerator |
| Form Liner Type | UFGS 2.7 | n/a | rubber matting - wood board - plywood panel - nailed-on inserts - fiberglass - plastic sheets - pattern as shown on drawings |

| UFGS Section and Date | UFGS MAY 2012 | 03 51 01 | PRECAST ROOF DECKS 01/08 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 33 15 | Concrete Deck Roofing |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Decking Type | UFGS 2.1 | n/a | concrete - structural cement-fiber |
| Joint Material | UFGS 2.4 | n/a | mastic - grout - mortar - lightweight concrete |

| UFGS Section and Date | UFGS MAY 2012 | 03 52 00 | LIGHTWEIGHT CONCRETE ROOF INSULATION 08/11 |
|---------------------------------|---------------|----------------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 33 13 | Lightweight Concrete Roofing Insulation |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Cement Type | UFGS 2.1 | n/a | portland type I - portland type II - portland type III |
| Aggregate Type | UFGS 2.2 | n/a | group I |
| Expansion Joint Filler Material | UFGS 2.6 | n/a | Class 1, semi-rigid, modified for maximum density of 96 kg per cubic meter |
| Insulation Type | UFGS 2.8 | n/a | RCPS Type I - RCPS Type II - RCPS Type IV - RCPS Type V |
| Compressive Strength | UFGS 3.1.1 | MPa | 9 |
| Minimum Oven Dry Density | UFGS 3.1.2 | kg/m3 | 350 |
| U Value | UFGS 3.1.3 | watt/square foot/degrees C | 0.28 |

| UFGS Section and Date | UFGS MAY 2012 | 03 52 16.19 | LIGHTWEIGHT INSULATING CONCRETE OVERLAY 08/11 |
|--------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 15 11 11 | Cementitious Concretes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|---------------------------------|-------------|----------------------------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Cement Type | UFGS 2.1 | n/a | portland type I - portland type II - portland type III |
| Aggregate Type | UFGS 2.2 | n/a | group I |
| Expansion Joint Filler Material | UFGS 2.6 | n/a | Class 1, semi-rigid, modified for maximum density of 96 kg per cubic meter |
| Insulation Type | UFGS 2.8 | n/a | RCPS Type I - RCPS Type II - RCPS Type IV - RCPS Type V |
| Compressive Strength | UFGS 3.1.1 | MPa | 9 |
| Minimum Oven Dry Density | UFGS 3.1.2 | kg/m3 | 350 |
| U Value | UFGS 3.1.3 | watt/square foot/degrees C | 0.28 |

| | | | |
|------------------------------|---------------|----------------------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 03 52 16 | LIGHTWEIGHT INSULATING CONCRETE 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 15 11 11 | Cementitious Concretes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Compressive Strength | UFGS 1.2.1 | KPa | 862 |
| Minimum Oven Dry Density | UFGS 1.2.1 | kg/m3 | 400 |
| U Value | UFGS 1.2.2 | watt/square foot/degrees C | Insert Value |
| Admixtures | UFGS 2.1.1 | n/a | air entraining - none |
| Aggregate Type | UFGS 2.1.2 | n/a | group I |
| Cement Type | UFGS 2.1.4 | n/a | portland type I - portland type III - IS |
| Reinforcement Type | UFGS 2.1.5 | n/a | wire mesh - welded wire fabric |
| Insulation Type | UFGS 2.1.7 | n/a | RCPS Type I - RCPS Type II - RCPS Type IV - RCPS Type V |

| | | | |
|------------------------------|---------------|-------------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 03 53 14.00 20 | LIGHT REFLECTIVE NONFERROUS METALLIC AGGREGATE FLOOR SYSTEM 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 23 11 11 | Concrete Structural Floor Decks |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|-------------------------------|-------------|------|---|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Surface Hardener | UFGS 2.2 | n/a | dry shake consisting of non-ferrous metallic aggregates, cementitious binder, plasticizer, and water-reducing admixture |
| Surface Evaporation Retardant | UFGS 2.3 | n/a | mono molecular surface evaporation retardant film |

| UFGS Section and Date | UFGS MAY 2012 | 03 55 16 | GYPSUM CONCRETE FLOOR PLANKS 04/08 |
|------------------------------|---------------|-------------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 11 13 11 11 | Gypsum Floor Underlayments |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Unit Type | UFGS 2.1 | n/a | gypsum plank - type X gypsum panel - 3.5 Mpa gypsum concrete |
| Subpurlin Type | UFGS 2.2 | n/a | open web truss - hot-rolled bulb - folded sheet metal tee |

| UFGS Section and Date | UFGS MAY 2012 | 03 62 16 | METALLIC NON-SHRINK GROUTING 02/12 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 15 15 11 | Concrete Grouts |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Cement Type | UFGS 2.1 | n/a | portland type I |
| Aggregate Type | UFGS 2.2 | n/a | group I |
| Admixtures | UFGS 2.4 | n/a | oxidizable metallic aggregate - metallic aluminum powder |
| Grout Type | UFGS 2.5 | n/a | expansive Type A - expansive Type B |

| UFGS Section and Date | UFGS MAY 2012 | 03 70 00 | MASS CONCRETE 02/10 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 31 11 | Structural Concrete |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |

| Attribute | Source | Unit | Value |
|-----------------|------------|------|--|
| Air Entrainment | UFGS 2.1.3 | n/a | Insert Value |
| Range of Slump | UFGS 2.1.4 | n/a | Insert Value |
| Cement Type | UFGS 2.2.1 | n/a | portland type I - portland type II - portland type III - portland type V - IP - IP(MS) - IP(MH) - IS - IS(MS) - IS(MH) - pozzalan class c - pozzalan class F - GGBF Slag - silica fume |
| Admixtures | UFGS 2.2.2 | n/a | air entraining - accelerating - retarding - water-reducing - high range water reducing - expansive - |
| Curing Material | UFGS 2.2.3 | n/a | polyethylene sheet - membrane-Forming curing compound - burlap |
| Aggregate | UFGS 2.2.5 | n/a | insert reqts |
| Grout Type | UFGS 2.2.6 | n/a | nonshrink, grade XX |
| Bonding Agent | UFGS 2.2.8 | n/a | latex - epoxy |
| finish | UFGS 3.3 | n/a | unformed - float - trowel - broom - abrasive aggregate - high velocity - class A - class A-HV - class B - class C - class D |

| UFGS Section and Date | UFGS MAY 2012 | 04 01 00.91 | RESTORATION AND CLEANING OF MASONRY IN HISTORIC STRUCTURES 05/12 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 27 13 15 | Masonry Restoration and Cleaning Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Cleaning Material | UFGS 2.1 | n/a | paint remover - chemical cleaner - biocide |
| Repair Material | UFGS 2.2 | n/a | mortar - stucco - brick - stone - terra-cotta - precast stone |
| Cleaning Method | UFGS 2.3.1 | n/a | sandblasting - water blasting - alternative blasting method - manual |

| UFGS Section and Date | UFGS MAY 2012 | 04 01 20 | REHABILITATION OF REINFORCED AND UNREINFORCED MASONRY WALLS USING FRP COMPOSITE STRUCTURAL REPOINTING 10/07 |
|------------------------------|---------------|-------------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 27 13 15 11 | Unit Masonry Restoration Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| FRP Strengthening | UFGS 1.2 | n/a | seismic - wind - blast |
| Elongation | UFGS 2.1 | percent | Insert Value |
| Visual Defects | UFGS 2.1 | n/a | Insert Value |

| Attribute | Source | Unit | Value |
|-------------------------------|---------------|-------------------|--|
| Tensile Strength | UFGS 2.1 | kPa | Insert Value |
| Tensile Modulus of Elasticity | UFGS 2.1 | kPa | Insert Value |
| Cross-sectional Area | UFGS 2.1 | mm ² | Insert Value |
| Fiber Volume Fraction | UFGS 2.1 | percent | Insert Value |
| Component Type | UFGS 2.2 | n/a | glass - carbon - aramid - rods - rectangles - grids |
| Component Material | UFGS 2.2 | n/a | vinyl ester - polyester - epoxy - urethane |
| Adhesive Type | UFGS 2.2 | n/a | epoxy - urethane |
| UFGS Section and Date | UFGS MAY 2012 | 04 01 21 | REHABILITATION OF REINFORCED AND UNREINFORCED MASONRY WALLS USING SURFACE APPLIED FRP COMPOSITES 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 27 13 15 11 | Unit Masonry Restoration Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| FRP Strengthening | UFGS 1.2 | n/a | seismic - wind - blast |
| Elongation | UFGS 2.2 | percent | Insert Value |
| Tensile Strength | UFGS 2.2 | kPa | Machine Direction: XX, Cross Direction XX |
| Breaking Load | UFGS 2.2 | kg/mm | Insert Value |
| Modulus of Elasticity | UFGS 2.2 | kPa | Insert Value |
| Ply Thickness | UFGS 2.2 | mm | Insert Value |
| Visual Defects | UFGS 2.2 | n/a | Insert Value |
| System Type | UFGS 2.3.1 | n/a | wet lay-up - prepreg - precured |
| Fiber Type | UFGS 2.3.1 | n/a | glass - carbon - aramid |
| Adhesive Type | UFGS 2.3.1 | n/a | vinyl ester - polyester - epoxy - urethane |
| Filler Type | UFGS 2.3.2 | n/a | epoxy - polyester |
| Fire Rating | UFGS 2.6 | n/a | class 1 |
| UFGS Section and Date | UFGS MAY 2012 | 04 20 00 | MASONRY 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 21 00 | Blocks and Bricks |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Component Category | UFGS 2.2-2.8 | n/a | brick - CMU - compressed earth block - precast concrete - stone |

| Attribute | Source | Unit | Value |
|---------------------|---------------|------|--|
| Component Type | UFGS 2.2-2.8 | n/a | solid - hollow - closure - utility - FBS - FBA - FBX - HBS - HBX - HBA - HBB |
| Component Material | UFGS 2.2-2.8 | n/a | clay - shale - sand-lime - refractory clay - adobe - concrete |
| Component Grade | UFGS 2.2 | n/a | Insert Value |
| Component Finish | UFGS 2.2-2.8 | n/a | natural - fluted - vertical scored - split ribbed |
| Mortar Type | UFGS 2.9/2.10 | n/a | M - S - N - O - RN - RS - RM |
| Anchor Type | UFGS 2.13 | n/a | wire mesh tie - wall tie - dovetail - adjustable - bar positioner |
| Joint Reinforcement | UFGS 2.14 | n/a | standard - heavy duty - extra heavy duty |
| Flashing Type | UFGS 2.19 | n/a | Coated-Copper - Copper - Stainless Steel - Reinforced Membrane |

| UFGS Section and Date | UFGS MAY 2012 | 04 21 13.13 | NONBEARING MASONRY VENEER/STEEL STUD WALLS 10/07 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 37 13 | Exterior Wall Cladding |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Component Type | UFGS 2.1 | n/a | FBS brick - FBX brick - FBH brick - CMU - prefaced CMU |
| Component Size | UFGS 2.1.1 | n/a | modular - insert value |
| Mortar Type | UFGS 2.2 | n/a | S |
| Joint Reinforcement | UFGS 2.3 | n/a | standard - heavy duty - extra heavy duty |
| Framing Grade | UFGS 2.4 | n/a | 33 |
| Insulation Type | UFGS 2.5 | n/a | blanket, type I, blanket, type II, blanket, type III, rigid polystyrene |
| Sheathing Type | UFGS 2.6/2.7 | n/a | gypsum - plywood |
| Anchor Type | UFGS 2.9 | n/a | pintle-eye - dovetail |

| UFGS Section and Date | UFGS MAY 2012 | 04 21 26 | GLAZED STRUCTURAL CLAY TILE AND PREFACED CONCRETE MASONRY UNITS 11/09 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 21 19 23 | Structural Clay Tiles |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Component Type | UFGS 2.2/2.3 | n/a | facing tile, type I grade SS - facing tile, type I grade S - prefaced CMU, grade S - prefaced CMU, grade N |
| Face Dimensions | UFGS 2.2/2.3 | mm x mm | Insert Value |
| Mortar Type | UFGS 2.4.1 | n/a | S - N |

| Attribute | Source | Unit | Value |
|-------------|------------|------|---|
| Grout Type | UFGS 2.4.2 | n/a | type I, fine - type I, coarse - type IP, fine - type IP, coarse |
| Anchor Type | UFGS 2.5 | n/a | rigid anchors - wire ties - horizontal truss |

| UFGS Section and Date | UFGS MAY 2012 | 04 23 00 | GLASS MASONRY UNITS 11/09 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 21 19 19 | Ceramic Glazed Clay Masonry Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - recycled content |
| Component Type | UFGS 2.1 | n/a | DECORA - VUE - ARGUS - VISTABRIK |
| Face Dimensions | UFGS 2.1 | mm x mm | 197 x 197 - 194 x 194 |
| Component Thickness | UFGS 2.1 | mm | 98 - 76 |
| Fire Rated | UFGS 2.1 | n/a | yes - no |
| Mortar Type | UFGS 2.2 | n/a | white cement, type S |
| Joint Reinforcement | UFGS 2.3.1 | n/a | horizontal truss |
| Anchor Type | UFGS 2.3.2 | n/a | strip - wire-type |
| Packing | UFGS 2.3.4 | n/a | polyethylene foam - neoprene |

| UFGS Section and Date | UFGS MAY 2012 | 05 05 23.13 10 | ULTRASONIC INSPECTION OF WELDMENTS 11/08 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 23 13 | Welded Joint Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |

| UFGS Section and Date | UFGS MAY 2012 | 05 05 23 | WELDING, STRUCTURAL 11/08 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 21 19 19 | Ceramic Glazed Clay Masonry Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | low toxicity |
| Welding Method | UFGS 3.1 | n/a | shielded metal-arc |
| Electrode Type | UFGS 3.1 | n/a | E6010 - E6011 - E6013 - E7018 - E7024 - E8018 - E11018 |

| Attribute | Source | Unit | Value |
|------------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 05 12 00 | STRUCTURAL STEEL 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 11 | Structural Frames |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Steel Type | UFGS 2.1 | n/a | structural - high-strength, low-alloy structural - quenched and tempered alloy - weathering structural - carbon-manganese - |
| Steel Grade | UFGS 2.1 | n/a | insert value |
| Steel Shape | UFGS 2.1 | n/a | insert value |
| Hardware Type | UFGS 2.2 | n/a | insert value |
| Primer | UFGS 2.4 | n/a | alkyd - epoxy-polyamide |
| Coating | UFGS 2.7.3 | n/a | fireproofing - epoxy |
| UFGS Section and Date | UFGS MAY 2012 | 05 14 00.13 | WELDING STRUCTURAL ALUMINUM FRAMING 11/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 23 13 | Welded Joint Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | low toxicity |
| Construction Type | UFGS 3.4 | n/a | class A - class B - class C - class D |
| AWS Requirement | UFGS 3.4 | n/a | section 2 - section 8 - section 9 - section 10 - section 11 |
| Non-Destructive Examination Method | UFGS 3.5 | n/a | VT - PT - RT - UT |
| Examination Level | UFGS 3.5 | n/a | level I - level II - level III |
| UFGS Section and Date | UFGS MAY 2012 | 05 21 13 | DEEP LONGSPAN STEEL JOIST FRAMING 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 19 | Rafters, Beams, and Joists |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Steel Conformance | UFGS 2.1 | n/a | SJI 279167 |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| Finish | UFGS 2.3 | n/a | rust inhibiting primer |
| UFGS Section and Date | UFGS MAY 2012 | 05 21 16 | LONGSPAN STEEL JOIST FRAMING 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 19 | Rafters, Beams, and Joists |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Steel Conformance | UFGS 2.1 | n/a | SJI 279167 |
| Finish | UFGS 2.3 | n/a | rust inhibiting primer |
| UFGS Section and Date | UFGS MAY 2012 | 05 21 19 | OPEN WEB STEEL JOIST FRAMING 07/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 19 | Rafters, Beams, and Joists |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Steel Conformance | UFGS 2.1 | n/a | SJI load tables |
| Finish | UFGS 2.3 | n/a | type I red oxide paint |
| UFGS Section and Date | UFGS MAY 2012 | 05 21 23 | STEEL JOIST GIRDER FRAMING 07/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 11 | Structural Frames |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Steel Conformance | UFGS 2.1 | n/a | SJI load tables |
| Finish | UFGS 2.3 | n/a | type I red oxide paint |
| UFGS Section and Date | UFGS MAY 2012 | 05 30 00 | STEEL DECKS 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 23 13 | Metal Structural Roof Decks |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|-------------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Fire Classification | UFGS 1.3.4 | n/a | UL Classified - FM Class 1 |
| Wind Uplift Resistance | UFGS 1.3.4 | kPa | 3 - 5 |
| Deck Material | UFGS 2.1.1 | n/a | flat rolled carbon steel |
| Material Thickness | UFGS 2.1.1 | mm | 0.75 - 0.92 |
| Deck Coating | UFGS 2.1.2 | n/a | Z275 - AZ165 |
| Sound Absorbing Material | UFGS 2.1.8 | n/a | glass fiber roll - glass fiber rigid strip |
| Deck Type | UFGS 2.3.1-2.3.6 | n/a | Cellular Metal Floor Deck - Roof Deck - Form Deck - Composite Deck - Acoustical Steel Deck |
| Attachment Method | UFGS 3.2.1 | n/a | welding - fastening |
| UFGS Section and Date | UFGS MAY 2012 | 05 40 00 | COLD-FORMED METAL FRAMING 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 11 | Structural Frames |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Maximum Deflection | UFGS 1.5 | n/a | L/240 - L/360 - L/600 |
| Component Type | UFGS 2.1 | n/a | stud - joist - track - bracing - bridging - accessory |
| Steel Grade | UFGS 2.1 | n/a | ST33H - ST230H - ST50H - ST340H |
| Coating Type | UFGS 2.1 | n/a | G60 (Z180) - A60 (ZF180) - AZ50 (AZ150) - GF30 (ZGF90) - G90 (Z275) |
| Material Thickness | UFGS 2.1 | mm | 0.84 - 1.09 - 1.37 - 1.72 - 2.45 |
| Flange Width | UFGS 2.1 | mm | 32 - 35 - 41 - 51 - 63 |
| Attachment Method | UFGS 3.1.1 | n/a | welding - fastening |
| UFGS Section and Date | UFGS MAY 2012 | 05 50 13 | MISCELLANEOUS METAL FABRICATIONS 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 00 | Framing Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Component Material | UFGS 2.1 | n/a | Structural Carbon Steel - Aluminum |

| Attribute | Source | Unit | Value |
|------------------|---------------|------|--|
| Component Finish | UFGS 2.2 | n/a | Galvanized - shop painted - anodic coating - organic coating |
| Component Type | UFGS 2.3-2.27 | n/a | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 05 50 14 | STRUCTURAL METAL FABRICATIONS 11/08 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 00 | Framing Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Component Material | UFGS 2.2.1 | n/a | Structural Carbon Steel - Structural Aluminum |
| Attachment Method | UFGS 2.2.2 | n/a | welding - fastening - riveting |
| Component Finish | UFGS 2.2 | n/a | zinc - cadmium - chromium |

| UFGS Section and Date | UFGS MAY 2012 | 05 50 15 | CIVIL WORKS FABRICATIONS 08/08 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 00 | Framing Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Component Type | UFGS 2.1 | n/a | insert value |
| Component Grade | UFGS 2.1 | n/a | insert value |
| Component Class | UFGS 2.1 | n/a | insert value |
| Component Style | UFGS 2.1 | n/a | insert value |
| Component Material | UFGS 2.1 | n/a | Structural Carbon Steel - Structural Aluminum |
| Component Finish | UFGS 2.2.1.1 | n/a | insert value |

| UFGS Section and Date | UFGS MAY 2012 | 05 51 00 | METAL STAIRS 02/12 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 23 17 | Stairs |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Steel Type | UFGS 2.2-2.12 | n/a | insert value |

| Attribute | Source | Unit | Value |
|----------------------|---------------|-------|---|
| Steel Shape | UFGS 2.2-2.12 | n/a | insert value |
| Concrete Insert Type | UFGS 2.13 | n/a | threaded - wedge |
| Protective Coating | UFGS 2.17 | n/a | red oxide primer - galvanized |
| Stair Framing Type | UFGS 2.18.2 | n/a | insert value |
| Riser Type | UFGS 2.18.3 | n/a | steel |
| Tread Type | UFGS 2.18.9 | n/a | steel - metal-pan concrete-filled - grating - nonskid metallic - precast concrete |
| Live Load | UFGS 2.18.9.1 | kg/m2 | 500 |
| Concentrated Load | UFGS 2.18.9.1 | kN | 1.3 - 2 |

| UFGS Section and Date | UFGS MAY 2012 | 05 51 33 | METAL LADDERS 05/10 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 23 15 | Ladders |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Ladder Finish | UFGS 2.2 | n/a | galvanized - anodic coating - organic coating |
| Ladder Cage | UFGS 2.3.1 | n/a | yes - no |
| Live Load | UFGS 2.3.2 | N | 1300 |

| UFGS Section and Date | UFGS MAY 2012 | 05 52 00 | METAL RAILINGS 02/11 |
|------------------------------|----------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 25 11 | Guardrails |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Rail Construction | UFGS 2.13/2.14 | n/a | steel - aluminum |
| Concentrated Load | UFGS 2.13/2.14 | N | 490 |
| Horizontal Load | UFGS 2.13/2.14 | N/m | 290 |
| Joint Type | UFGS 2.13/2.14 | n/a | flush type rail fittings - mitered and welded - bent - slip-on fittings |
| Rail Diameter | UFGS 2.13/2.14 | mm | 40 - 50 |
| Rail Finish | UFGS 2.13/2.14 | n/a | galvanized - shop painted - mill - anodized |

| UFGS Section and Date | UFGS MAY 2012 | 05 59 10 | ROLLING COVER FOR AVIATION REFUELING VAULTS 02/10 |
|--------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 29 13 | Covers and Shelters |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Wheel Assembly | UFGS 2.1.7 | n/a | 150 mm Dia. x 50 mm wide - 80 mm Dia. x 40 mm wide |
| Cover Construction | UFGS 2.2.3/2.2.4 | n/a | steel - aluminum |
| Connection Type | UFGS 2.2.5/2.4 | n/a | bolted - welded |
| Finish | UFGS 2.5 | n/a | galvanized - insert value |

| UFGS Section and Date | UFGS MAY 2012 | 05 59 13 | FABRICATION OF HYDRAULIC STEEL STRUCTURES 08/09 |
|------------------------------------|------------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 29 11 | Pre Engineered Structures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Connection Type | UFGS 2.1.4/2.1.5 | n/a | bolted - welded |
| Non-Destructive Examination Method | UFGS 3.5 | n/a | MT - PT - RT - UT |
| Examination Level | UFGS 3.5 | n/a | level I - level II - level III |

| UFGS Section and Date | UFGS MAY 2012 | 05 72 00 | DECORATIVE METAL SPECIALTIES 02/12 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 00 00 | Interior and Finish Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Concrete Insert Type | UFGS 2.1.1 | n/a | slotted - wedge - non-removable |
| Metal Type | UFGS 2.2 | n/a | Aluminum-Alloy 3003 - Aluminum-Alloy 5005 - Aluminum-Alloy 5140 - Aluminum-Alloy 6061 |
| Component Type | UFGS 2.3 | n/a | joint cover, plain - joint cover, recessed - joint cover, non-slip |
| Component Finish | UFGS 2.4.4 | n/a | insert value |
| | UFGS | n/a | |

| UFGS Section and Date | UFGS MAY 2012 | 06 10 00 | ROUGH CARPENTRY 02/12 |
|--------------------------|---------------|-------------|-----------------------|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 00 | Framing Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|-----------------------|-------------------|---|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.11 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Material Classification | UFGS 2.1 | n/a | virgin - salvaged - recovered - engineered wood - plastic - gypsum |
| Species/Type | UFGS 2.2 | n/a | insert value |
| Unit Composition | UFGS 2.2 | n/a | solid - treated - glue-laminated - laminated-strand - laminated-veneer |
| Appearance Grade | UFGS 2.2 | n/a | industrial - architectural - premium |
| Component Usage | UFGS 2.2-2.5 | n/a | stud - joist - rafter - girder - bracing - plate - sheathing |
| Unit Stress Fb | UFGS 2.2.1 | kPa | 7200 - 8300 |
| Unit Stress Ft | UFGS 2.2.1 | kPa | 4800 |
| Unit Stress Fc | UFGS 2.2.1 | kPa | 5400 |
| Unit Stress Fv | UFGS 2.2.1 | kPa | 8300 |
| Unit Stress E | UFGS 2.2.1 | Mpa | 8300 |
| Span Rating | UFGS 2.3 | n/a | 32/16 - 24/16 - 48/24 |
| Grade | UFGS 2.3 | n/a | structural I - structural II - C-D - C-C |
| UFGS Section and Date | UFGS MAY 2012 | 06 13 33 | PIER TIMBERWORK 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 19 15 15 | Heavy Timber Construction |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood |
| Species/Type | UFGS 2.1.1 | n/a | southern pine - fir-larch |
| Unit Stress Rating | UFGS 2.1.1 | Mpa | insert value |
| Preservative Treatment | UFGS 2.1.1.2 | n/a | creosote - water-borne - dual-treatment |
| Hardware Type | UFGS 2.1.2 | n/a | cast-iron - galvanized steel |
| Wire Rope and Fitting Type | UFGS 2.1.2 | n/a | type I, class 2 - type III, class 2 - type III, class 3 |
| UFGS Section and Date | UFGS MAY 2012 | 06 18 00 | GLUED-LAMINATED CONSTRUCTION 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 35 00 | Framing Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |

| Attribute | Source | Unit | Value |
|-----------------------|--------------|------|---|
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert value |
| Species/Type | UFGS 2.1.1.1 | n/a | insert value |
| Grade | UFGS 2.1.1.1 | n/a | structural I - structural II - C-D - C-C |
| Appearance Grade | UFGS 2.1.1.1 | n/a | industrial - architectural - premium |
| Flame Spread | UFGS 2.1.2 | n/a | Less than 25 |
| Finish | UFGS 2.1.4 | n/a | insert value |
| Hardware Type | UFGS 2.1.5 | n/a | none - structural steel - hot rolled steel sheet - type 304 stainless steel - type 316 stainless steel |

| UFGS Section and Date | UFGS MAY 2012 | 06 20 00 | FINISH CARPENTRY 02/12 |
|------------------------------|----------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 15 31 | Wall Specialties and Trim |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Species/Type | UFGS 2.1.2 | n/a | insert value |
| Grade | UFGS 2.1.2 | n/a | insert value |
| Component Category | UFGS 2.1.3-2.5 | n/a | shelving - soffit - countertop - stair component - shoe - seat - bumper - siding - cabinet -insert value |
| Component Type | UFGS 2.1.3-2.5 | n/a | insert value |
| Moisture Content | UFGS 2.6 | percent | 6 - 12 - 15 - 19 |
| Preservative Treatment | UFGS 2.7.3 | n/a | 2 percent copper naphthenate - 3 percent zinc naphthenate - 1.8 percent copper-8-quinolinolate - fire retardant |
| AWI Quality Grade | UFGS 2.10.5.1 | n/a | premium - custom - economy |

| UFGS Section and Date | UFGS MAY 2012 | 06 41 16.00 | LAMINATE CLAD ARCHITECTURAL CASEWORK 10 08/10 |
|------------------------------|---------------------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 19 11 | Modular General Casework |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4.3 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Construction | UFGS 2.1 | n/a | plywood - particleboard - MDF - solid polymer - HPDL - Melamine |
| Grade | UFGS 2.3 | n/a | HGS - VGS - HGP - VGP - HGF - VGF - CLS - BK |

| Attribute | Source | Unit | Value |
|-----------------|-------------|------|--|
| Hardware Type | UFGS 2.7 | n/a | hinge - pull - glide |
| Hardware Finish | UFGS 2.7 | n/a | BHMA no. XX |
| Glass Type | UFGS 2.11.1 | n/a | insert value |
| Frame Style | UFGS 2.12 | n/a | full overlay - reveal overlay - face framed - insert value |
| Door Style | UFGS 2.12 | n/a | insert value |
| Joinery Method | UFGS 2.12 | n/a | screw - dowel - dado - spline - biscuit |

| UFGS Section and Date | UFGS MAY 2012 | 06 61 16 | SOLID POLYMER (SOLID SURFACING) FABRICATIONS 08/10 |
|------------------------------|------------------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 19 11 | Modular General Casework |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4.3 | n/a | regional - low voc - low toxicity - recycled content - biobased |
| Material | UFGS 2.1 | n/a | Acrylic Polymer - Acrylic-modified Polymer |
| Flame Spread | UFGS 2.1 | n/a | 25 |
| Smoke Developed | UFGS 2.1 | n/a | 30 - 100 |
| Surface Pattern | UFGS 2.1.3 | n/a | insert value |
| Component Attachment | UFGS 2.3.3 | n/a | permanently attached - caulked - none |

| UFGS Section and Date | UFGS MAY 2012 | 06 71 33 | FIBERGLASS REINFORCED PLASTIC (FRP) LADDERS 05/12 |
|----------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 23 15 | Ladders |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Tensile Strength | UFGS 2.1.2 | MPa | 207 |
| Tensile Modulus | UFGS 2.1.2 | MPa | 17.2 |
| Flexural Strength | UFGS 2.1.2 | MPa | 20.6 |
| Flexural Modulus | UFGS 2.1.2 | MPa | 12.4 |
| Flexural Modulus-Full Section | UFGS 2.1.2 | MPa | 1.93 |
| Short Beam Shear | UFGS 2.1.2 | MPa | 31 |
| Shear Modulus-Transverse | UFGS 2.1.2 | MPa | 31 |
| Coefficient of Thermal Expansion | UFGS 2.1.2 | cm/cm/m | 2.032 |
| Flame Spread | UFGS 2.1.2 | n/a | 25 or less |
| Cage | UFGS 2.3 | n/a | yes - no |

| UFGS Section and Date | UFGS MAY 2012 | 06 73 01 | FIBERGLASS REINFORCED PLASTIC (FRP) GRATING 02/12 |
|-----------------------|---------------|----------|---|
|-----------------------|---------------|----------|---|

| Attribute | Source | Unit | Value |
|----------------------------------|---------------|-------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 00 00 | Interior and Finish Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Tensile Strength | UFGS 2.1 | MPa | 206 |
| Flexural Strength | UFGS 2.1 | MPa | 206 |
| Flexural Modulus | UFGS 2.1 | MPa | 12.4 |
| Shear Strength | UFGS 2.1 | MPa | 31 |
| Coefficient of Thermal Expansion | UFGS 2.1 | cm/cm/m | 8 |
| Flame Spread | UFGS 2.1.2 | n/a | 25 or less |
| UFGS Section and Date | UFGS MAY 2012 | 06 82 14 | FIBERGLASS REINFORCED PLASTIC (FRP) PIPE AND TUBE RAILINGS 05/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 25 11 | Guardrails |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Uniform Load | UFGS 1.3.1 | Kgf/m | 6.91 |
| Concentrated Load | UFGS 1.3.1 | Kgf | 90.72 |
| Horizontal Load | UFGS 1.3.1 | kPa | 1.2 |
| Tensile Strength | UFGS 2.2 | MPa | 207 |
| Tensile Modulus | UFGS 2.2 | MPa | 17.2 |
| Flexural Strength | UFGS 2.2 | MPa | 20.6 |
| Flexural Modulus | UFGS 2.2 | MPa | 12.4 |
| Flexural Modulus-Full Section | UFGS 2.2 | MPa | 1.93 |
| Short Beam Shear | UFGS 2.2 | MPa | 31 |
| Shear Modulus-Transverse | UFGS 2.2 | MPa | 31 |
| Coefficient of Thermal Expansion | UFGS 2.2 | cm/cm/m | 2.032 |
| Flame Spread | UFGS 2.2 | n/a | 25 or less |
| Attachment Method | UFGS 2.3.2 | n/a | cast-in-place - epoxy - mechanical |
| UFGS Section and Date | UFGS MAY 2012 | 07 11 13 | BITUMINOUS DAMPPROOFING 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 15 13 11 | Bituminous Dampproofing Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Asphalt Type | UFGS 2.1 | n/a | Type I - Type II |
| Coal-Tar Pitch Type | UFGS 2.4 | n/a | Type II - Type III |
| Fibrous Asphalt Type | UFGS 2.5 | n/a | Type I - Type II |
| Asphalt Emulsion Type | UFGS 2.6 | n/a | Fibrated - Non-Fibrated |
| Application Method | UFGS 3.3 | n/a | Cold - Hot |

| | | | |
|--------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 12 00 | BUILT-UP BITUMINOUS WATERPROOFING 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 17 11 | Built Up Bituminous Waterproofing |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Bitumen Type | UFGS 2.1 | n/a | Type I - Type II - Type III |
| Bituminous Plastic Cement Type | UFGS 2.2 | n/a | Type I - Type II |
| Membrane Fabric | UFGS 2.3 | n/a | Cotton - Woven Burlap |

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|--------------------------------------|---------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 13 53 | ELASTOMERIC SHEET WATERPROOFING 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 17 13 13 | Elastomeric Sheet Waterproofing |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Butyl Rubber Sheeting Thickness | UFGS 2.2 | mils (mm) | Minimum 60 (1.5) |
| Thermoplastic PVC Membrane Thickness | UFGS 2.3 | mils (mm) | Minimum 60 (1.5) |
| Composite Self-Adhering Sheeting | UFGS 2.4 | mils (mm) | Minimum 60 (1.5) |
| Membrane Protection | UFGS 2.5 | n/a | Protection Board - Polymeric Grid |

| | | | |
|--------------------------|---------------|----------------|-----------------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 07 14 00 | FLUID-APPLIED WATERPROOFING 02/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 17 15 | Fluid Applied Waterproofing |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-----------|--|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Fluid-Applied Membrane Type | UFGS 2.1 | n/a | Insert Value |
| Membrane Thickness (Wet) | UFGS 3.3 | mils (mm) | Minimum 60 (1.5) |

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|------------------------------|---------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 16 19 | METALLIC OXIDE WATERPROOFING 01/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 17 19 15 | Metal Oxide Waterproofing |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |

| | | | |
|---------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 17 00 | BENTONITE WATERPROOFING 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 17 21 | Bentonite Waterproofing |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Metallic Waterproofing Compound | UFGS 2.4 | n/a | Pulverized Cast Iron |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 19 00 | WATER REPELLENTS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 23 17 | Water Repellents |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|-------------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 21 13 | BOARD AND BLOCK INSULATION 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 19 11 | Slab and Board Thermal Insulation |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | reduced emissions - regional - low voc - low toxicity - recycled content - nauf - biobased |
| Free Swell Rating | UFGS 2.1.2.1 | cc | Minimum 16 |
| UFGS Section and Date | UFGS MAY 2012 | 07 21 16 | MINERAL FIBER BLANKET INSULATION 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 19 13 13 | Rock Wool Blanket Thermal Insulation |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | reduced emissions - regional - low voc - low toxicity - recycled content - nauf - biobased |
| Water Repellent | UFGS 2.2 | n/a | Silane - Siloxane - Acrylic |
| Percent Solids | UFGS 2.2 | Percentage | Insert Value |
| Water Absorption | UFGS 2.3 | Percentage per 48 hours | Insert Value |
| Moisture Vapor Transmission | UFGS 2.3 | Perms | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 07 21 23 | LOOSE FILL THERMAL INSULATION 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 19 17 | Loose Fill Thermal Insulation |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | reduced emissions - regional - low voc - low toxicity - recycled content - nauf - biobased |
| Insulation Type | UFGS 2.1 | n/a | Cellular Glass - EPS - Mineral Fiber - Unfaced Polyisocyanurate - Faced Polyisocyanurate |
| Thermal Resistance | UFGS 2.1.1 | R Value | Insert Value |
| Water Vapor Permeance | UFGS 2.2 | Perms | Insert Value |

| Attribute | Source | Unit | Value |
|-------------------------------|------------------------|------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 22 00 | ROOF AND DECK INSULATION 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 19 11 | Slab and Board Thermal Insulation |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4.3 | n/a | reduced emissions - regional - low voc - low toxicity - recycled content - nauf - biobased |
| Thermal Resistance | UFGS 2.1.1 | R Value | Insert Value |
| Vapor Retarder | UFGS 2.4 | g/Pa.s.m2 [Perm] | [5.72 by 10-8] [_____] g/Pa.s.m2 [1] [_____] perm |
| UFGS Section and Date | UFGS MAY 2012 | 07 24 00 | EXTERIOR INSULATION AND FINISH SYSTEMS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 33 15 | Wall Exteriors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | reduced emissions - regional - low voc - low toxicity - recycled content - nauf - biobased |
| System Description | UFGS 1.2 | n/a | Class PB - Class PM |
| Sheathing Board | UFGS 2.1 | n/a | Fiber Reinforced Cement - Glass Mat Gypsum |
| Insulation Thermal Resistance | UFGS 2.6 | R Value | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 07 27 00.45 10 | BUILDING AIR BARRIER SYSTEM 05/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 25 | Air Barriers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Building Air Tightness | UFGS 3.3 | n/a | Minimum of 12 positive and 12 negative |
| UFGS Section and Date | UFGS MAY 2012 | 07 31 13 | ASPHALT SHINGLES 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 15 11 | Asphalt Roof Shingles |
| Name | COBie Guide | n/a | Type XX Space#-01 |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|------|---|
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - recycled content - high albedo |
| Shingle Type | UFGS 2.1 | n/a | Strip - Architectural |
| Felt Underlayment | UFGS 2.1.4 | n/a | Type I - Type II |

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|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 07 31 26 | SLATE ROOFING 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 19 11 | Roof Slates |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc |
| Slate Type | UFGS 2.1 | n/a | Standard Thickness - Graduated |
| Underlayment | UFGS 2.1.2 | n/a | Asphalt Saturated Felt - Self-Adhering Membrane |

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|------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 07 32 13 | ROOF TILES 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 17 | Roof Tiles |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - recycled content - high albedo |
| Tile Type | UFGS 2.1 | n/a | Clay - Concrete |
| Underlayment | UFGS 2.2 | n/a | Asphalt Saturated Felt - Self-Adhering Membrane |

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|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 07 32 14 | CLAY TILE ROOFING REPLACEMENT OR REPAIR 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 17 11 | Clay Roof Tiles |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|----------------|-------------|------|---|
| Sustainability | COBie Guide | n/a | insert reqts |
| Tile Type | UFGS 2.1 | n/a | Clay - Concrete |
| Underlayment | UFGS 2.2 | n/a | Asphalt Saturated Felt - Self-Adhering Membrane |

| UFGS Section and Date | UFGS MAY 2012 | 07 41 13 | METAL ROOF PANELS 05/11 |
|------------------------------|---------------|-------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 27 11 11 | Metal Roof Panels |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Roof Panel Type | UFGS 2.1 | n/a | Aluminum Sheet - Steel Sheet |
| Roof Panel Yield | UFGS 2.1 | ksi | 30 - 40 - 50 - 80 |
| Roof Panel Profile | UFGS 2.1 | n/a | Ribbed - V-Beam - Corrugated - Standing Seam |
| Finish | UFGS 2.2 | n/a | PVDF2 - SMP - PVC |

| UFGS Section and Date | UFGS MAY 2012 | 07 41 63 | FABRICATED ROOF PANEL ASSEMBLIES 05/09 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 27 | Roof Cladding |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Roof Panel Type | UFGS 2.1 | n/a | Aluminum Sheet - Steel Sheet |
| Roof Panel Yield | UFGS 2.1 | ksi | 30 - 40 - 50 - 80 |
| Roof Panel Profile | UFGS 2.1 | n/a | Ribbed - V-Beam - Corrugated - Standing Seam |
| Finish | UFGS 2.1 | n/a | PVDF2 |

| UFGS Section and Date | UFGS MAY 2012 | 07 42 13 | METAL WALL PANELS 05/11 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23.13.37.13 | #N/A |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Wall Panel Type | UFGS 2.1 | n/a | Aluminum Sheet - Steel Sheet |

| Attribute | Source | Unit | Value |
|------------------------------|-------------------------|-------------------|--|
| Wall Panel Yield | UFGS 2.1 | ksi | 30 - 40 - 50 - 80 |
| Wall Panel Profile | UFGS 2.1 | n/a | Ribbed - V-Beam - Corrugated - Standing Seam |
| Finish | UFGS 2.1 | n/a | PVDF2 |
| UFGS Section and Date | UFGS MAY 2012 | 07 42 63 | FABRICATED WALL PANEL ASSEMBLIES 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23.13.37.13 | #N/A |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.5.10 | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Wall Panel Type | UFGS 2.1 | n/a | Aluminum Sheet - Steel Sheet |
| Wall Panel Yield | UFGS 2.1 | ksi | 30 - 40 - 50 - 80 |
| Wall Panel Profile | UFGS 2.1 | n/a | Ribbed - V-Beam - Corrugated - Standing Seam |
| Wall Panel Core | UFGS 2.1 | n/a | Hollow - Insulated |
| Finish | UFGS 2.1 | n/a | PVDF2 |
| UFGS Section and Date | UFGS MAY 2012 | 07 51 13 | BUILT-UP ASPHALT ROOFING 05/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 31 13 11 | Asphalt Multi Layer Roof Membranes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.12 | n/a | regional - low voc - low toxicity - high albedo |
| Base Sheet Type | UFGS 2.2 | n/a | Fiberglass Venting - Fiberglass, Perforated - Fiberglass, non-perforated |
| Ply Sheet Type | UFGS 2.2 | n/a | Type IV - Type VI |
| Base Flashing Type | UFGS 2.3 | n/a | Modified Bituminous |
| Asphalt Type | UFGS 2.4 | n/a | Type II - Type III - Type IV |
| Surfacing | UFGS 2.5 | n/a | Mineral Surfaced Cap Sheet - Aggregate |
| UFGS Section and Date | UFGS MAY 2012 | 07 52 00 | MODIFIED BITUMINOUS MEMBRANE ROOFING 05/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 31 13 13 | Built Up Bituminous Multi Layer Roof Membranes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------|-----------------------|------|---|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.13 | n/a | regional - low voc - low toxicity - high albedo |
| Base Sheet Type | UFGS 2.1 | n/a | Fiberglass Venting - Fiberglass, perforated - Fiberglass, non-perforated - SBS - APP |
| Interply Sheet Type | UFGS 2.1 | n/a | Type I, Grade S - Type II, Grade S |
| Cap Sheet Type | UFGS 2.1 | n/a | APP, Type II Grade S - APP, Type II Grade G - SBS, Type II Grade S - SBS, Type II Grade G |
| Asphalt Type | UFGS 2.4 | n/a | Type II - Type III - Type IV |
| Application Method | UFGS 3.3.3 | n/a | Hot Asphalt - Cold-Applied - Torch Welded |

| UFGS Section and Date | UFGS MAY 2012 | 07 53 23 | ETHYLENE-PROPYLENE-DIENE-MONOMER ROOFING 05/12 |
|------------------------------|-----------------------|-------------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 31 11 21 | Ethylene Propylene Diene Monomer (EPDM) Single Layer Roof Membranes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.12 | n/a | regional - low voc - low toxicity - high albedo |
| Membrane Type | UFGS 2.1 | n/a | Reinforced EPDM, 90 mils - Non-Reinforced EPDM, 90 mils |
| Application Method | UFGS 3.2 | n/a | fully adhered - loose-laid ballasted - mechanically fastened - combined fully adhered - mechanically fastened |
| Seaming Method | UFGS 3.2.4 | n/a | Taped |

| UFGS Section and Date | UFGS MAY 2012 | 07 54 19 | POLYVINYL-CHLORIDE (PVC) ROOFING 11/08 |
|------------------------------|---------------|-------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 31 11 27 | Polyvinyl chloride (PVC) Single Layer Roof Membranes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - high albedo |
| Membrane Type | UFGS 2.2 | n/a | minimum 0.045 inch ENERGYSTAR labeled Reinforced PVC |
| Application Method | UFGS 3.2 | n/a | adhered - mechanically fastened - combination adhered/protected membrane - loose-laid, paver ballasted - IRMA - garden-style |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|-------------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 07 55 00 | PROTECTED MEMBRANE ROOFING (PMR) 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 31 | Roof Membranes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | reduced emissions - regional - low voc - low toxicity - high albedo |
| Membrane Type | UFGS 2.2 | n/a | Built-Up - Modified Bituminous - EPDM - PVC |
| Thermal Resistance | UFGS 2.3 | R Value | Insert Value |
| Ballast | UFGS 2.5 | n/a | Pavers - Aggregate |
| UFGS Section and Date | UFGS MAY 2012 | 07 57 13 | SPRAYED POLYURETHANE FOAM (SPF) ROOFING 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 31 17 | Coated Foam Roofing |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4.6 | n/a | reduced emissions - regional - low voc - low toxicity - high albedo |
| Coating Type | UFGS 2.2 | n/a | Type A - Type B - Type CB - Type CF |
| Surfacing | UFGS 2.4 | n/a | Ceramic Granules - None |
| UFGS Section and Date | UFGS MAY 2012 | 07 60 00 | FLASHING AND SHEET METAL 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 41 13 | Roof Flashings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Sheet Material | UFGS 2.1 | n/a | Copper - Lead Coated Copper - Lead - Steel - Zinc - Aluminum - Alclad |
| UFGS Section and Date | UFGS MAY 2012 | 07 61 01 | COPPER ROOF SYSTEM 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 27 11 11 | Metal Roof Panels |
| Name | COBie Guide | n/a | Type XX Space#-01 |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|------|--|
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Roof Panel Material | UFGS 2.1 | n/a | Clod Rolled Copper, minimum 4.9 kg per square meter |
| Vapor Retarder | UFGS 2.5 | n/a | Asphalt Saturated Felt - Polyethylene Sheeting |

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|-------------------------------|---------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 61 14.00 20 | STEEL STANDING SEAM ROOFING 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 27 11 11 | Metal Roof Panels |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Corrugation Height | UFGS 2.1 | mm | 45 - 57 - 76 |
| Texture | UFGS 2.1.2 | n/a | Stucco embossed - Smooth - Smooth with raised intermediate ribs |
| Insulation Thermal Resistance | UFGS 2.5 | R Value | Insert Value |

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|------------------------------|---------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 61 15.00 20 | ALUMINUM STANDING SEAM ROOFING 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 39 27 11 11 | Metal Roof Panels |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Panel Material | UFGS 2.1 | n/a | 3004 aluminum |
| Texture | UFGS 2.1.2 | n/a | Stucco embossed - Smooth - Smooth with raised intermediate ribs |

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|--------------------------|---------------|-------------|-----------------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 07 62 10 | COPPER SHEET METAL FLASHING 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 41 13 | Roof Flashings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|------|--|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - high albedo |
| Flashing Material | UFGS 2.1 | n/a | Copper |

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|------------------------------|---------------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 72 00 | ROOF VENTILATORS, GRAVITY-TYPE 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 41 17 | Roof Vents |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Ventilator Type | UFGS 2.2 - UFGS 2.4 | n/a | Ridge - Stationary - Turbine |

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|------------------------------|---------------|--------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 81 00 | SPRAY-APPLIED FIREPROOFING 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 11 15 | Fireproofing Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Dry Density | UFGS 2.1 | kg per cubic meter | 240 - 320 - 640 |
| Cohesion/Adhesion strength | UFGS 2.1 | kPa | 9.57 - 20.83 - 350 |

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|------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 07 84 00 | FIRESTOPPING 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 25 13 | Firestopping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Flame Spread | UFGS 2.1 | n/a | 25 or less |
| Smoke Developed | UFGS 2.1 | n/a | 50 or less |
| Fire Resistance Rating | UFGS 2.1 | n/a | At least equal to fire-rating of fire wall or floor to be protected |

| Attribute | Source | Unit | Value |
|------------------------------|--------------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 07 92 00 | JOINT SEALANTS 01/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 23 19 11 | Joint Fillers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Sealant Type | UFGS 2.1 | n/a | Latex - Elastomeric |
| Backstop | UFGS 2.4 | n/a | Rubber - PVC - Synthetic Rubber - Neoprene - Butyl Rubber - Silicon Rubber |
| UFGS Section and Date | UFGS MAY 2012 | 08 11 13 | STEEL DOORS AND FRAMES 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 15 | Steel Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| System Description | UFGS 1.2 | n/a | interior and exterior steel doors and frames |
| Door Width | COBie Guide | mm (in) | 762 mm (30 in) - 914 mm (36 in) - 1066 mm (42 in) |
| Door Height | COBie Guide | mm (in) | 2032 mm (80 in) - 2133 mm (84 in) - 2438 mm (96 in) |
| Door Thickness | COBie Guide | mm (in) | 44.5 mm (1.75 in) |
| Door Type, Standard | COBie Guide/UFGS 2.1 | n/a | standard duty - heavy duty - extra heavy duty - maximum duty |
| Door Type, Custom | COBie Guide/UFGS 2.2 | n/a | NAAMM-HMMA-HMM |
| Door Material | COBie Guide/UFGS 2.1/2.2 | n/a | steel - galvanized steel - stainless steel |
| Door Finish | COBie Guide/UFGS 2.11 | n/a | factory primed - zinc-coated factory primed - factory enamel |
| Glazing Type | COBie Guide/UFGS 2.13 | n/a | tempered - laminated |
| Security Code | COBie Guide | n/a | 5 min FE - 15 min FE - 60 min FE - UL 752 Level 1 BR - UL 752 Level 3 BR |
| Frame Type | COBie Guide/UFGS 2.7 | n/a | welded - knock-down |
| Frame Material | COBie Guide/UFGS 2.1/2/2 | n/a | steel - galvanized steel - stainless steel |
| Frame Finish | COBie Guide/UFGS 2.11 | n/a | factory primed - zinc-coated factory primed - factory enamel |

| Attribute | Source | Unit | Value |
|-------------------|-----------------------|------|--|
| Frame Head | COBie Guide | n/a | insert value |
| Frame Jam | COBie Guide | n/a | insert value |
| Frame Sill | COBie Guide | n/a | insert value |
| Fire Label Rating | COBie Guide/UFGS 2.8 | n/a | UL 180 min A - UL 90 min B - UL 45 min C - UL 90 min D - UL 45 min E - UL 20 min |
| Hardware Set | COBie Guide/UFGS 2.10 | n/a | insert value |
| Pressurization | COBie Guide | n/a | insert value |
| Egress Door | COBie Guide | n/a | insert value |

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|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 11 16 | ALUMINUM DOORS AND FRAMES 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 13 | Aluminum Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Door Width | COBie Guide | mm (in) | 762 mm (30 in) - 914 mm (36 in) - 1066 mm (42 in) |
| Door Height | COBie Guide | mm (in) | 2032 mm (80 in) - 2133 mm (84 in) - 2438 mm (96 in) |
| Door Thickness | COBie Guide | mm (in) | 44.5 mm (1.75 in) |
| Air Infiltration | UFGS 1.2.2 | cms/sm | 2.63 by 10-5 at 0.30 kPa |
| Water Penetration | UFGS 1.2.3 | n/a | No penetration at 0.38 kPa |
| Door Type, Standard | UFGS 2.3.2 | n/a | Flush - Full Glazed Stile and Rail |
| Door Type, Custom | COBie Guide | n/a | insert value |
| Door Material | UFGS 2.2 | n/a | Aluminum, 6063-T5 Alloy |
| Stile Width | UFGS 2.3.2.1 | n/a | Narrow - Medium - Wide |
| Door Facing | UFGS 2.3.2.2 | n/a | Vertical Ribbed - Embossed - Plain Smooth |
| Door Core | UFGS 2.3.2.2 | n/a | Honeycomb - Solid Fibrous |
| Door Finish | UFGS 2.3.8 | n/a | Anodic - Organic |
| Glazing Type | COBie Guide | n/a | insert value |
| Frame Type | COBie Guide | n/a | insert value |
| Frame Material | COBie Guide | n/a | Aluminum, 6063-T5 Alloy |
| Frame Finish | UFGS 2.3.8 | n/a | Anodic - Organic |
| Frame Head | COBie Guide | n/a | insert value |
| Frame Jam | COBie Guide | n/a | insert value |
| Frame Sill | COBie Guide | n/a | insert value |
| Fire Label Rating | COBie Guide | n/a | insert value |
| Hardware Set | COBie Guide | n/a | insert value |
| Pressurization | COBie Guide | n/a | insert value |
| Egress Door | COBie Guide | n/a | insert value |

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|--------------------------|---------------|-------------|-------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 08 11 69 | METAL STORM DOORS 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 | Metal Doors |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------------|--|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Door Width | COBie Guide | mm (in) | 762 mm (30 in) - 914 mm (36 in) - 1066 mm (42 in) |
| Door Height | COBie Guide | mm (in) | 2032 mm (80 in) - 2133 mm (84 in) - 2438 mm (96 in) |
| Door Thickness | COBie Guide | mm (in) | 44.5 mm (1.75 in) |
| Air Infiltration | UFGS 1.2.2 | cms/sm | 2.63 by 10-5 at 0.30 kpa |
| Water Penetration | UFGS 1.2.3 | n/a | No penetration at 0.38 kPa |
| Door Material | UFGS 2.2 | n/a | Aluminum, 6063-T5 Alloy |
| Door Type, Standard | UFGS 2.3.2 | n/a | Flush - Full Glazed Stile and Rail |
| Door Type, Custom | COBie Guide | n/a | insert value |
| Stile Width | UFGS 2.3.2.1 | n/a | Narrow - Medium - Wide |
| Door Facing | UFGS 2.3.2.2 | n/a | Vertical Ribbed - Embossed - Plain Smooth |
| Door Core | UFGS 2.3.2.2 | n/a | Honeycomb - Solid Fibrous |
| Door Finish | UFGS 2.3.8 | n/a | Anodic - Organic |
| Glazing Type | COBie Guide | n/a | insert value |
| Frame Type | COBie Guide | n/a | insert value |
| Frame Material | COBie Guide | n/a | insert value |
| Frame Finish | UFGS 2.3.8 | n/a | Anodic - Organic |
| Frame Head | COBie Guide | n/a | insert value |
| Frame Jam | COBie Guide | n/a | insert value |
| Frame Sill | COBie Guide | n/a | insert value |
| Fire Label Rating | COBie Guide | n/a | insert value |
| Hardware Set | COBie Guide | n/a | insert value |
| Pressurization | COBie Guide | n/a | insert value |
| Egress Door | COBie Guide | n/a | insert value |
| UFGS Section and Date | UFGS MAY 2012 | 08 11 73 | SLIDING FIRE DOORS 01/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 31 11 15 | Fire Rated Sliding Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Door Width | COBie Guide | mm (in) | 762 mm (30 in) - 914 mm (36 in) - 1066 mm (42 in) |
| Door Height | COBie Guide | mm (in) | 2032 mm (80 in) - 2133 mm (84 in) - 2438 mm (96 in) |
| Door Thickness | COBie Guide | mm (in) | 44.5 mm (1.75 in) |

| Attribute | Source | Unit | Value |
|----------------------|-------------|------|--|
| Door Type, Standard | UFGS 2.2 | n/a | Steel-Covered Composite - Hollow-Metal - Corrugated Sheet Metal - Tin-Clad |
| Door Type, Custom | COBie Guide | n/a | insert value |
| Door Material | COBie Guide | n/a | Steel |
| Exterior Door Finish | UFGS 2.6 | n/a | Galvanized |
| Interior Door Finish | UFGS 2.6 | n/a | Galvanized - Shop Primed |
| Glazing Type | COBie Guide | n/a | insert value |
| Frame Type | COBie Guide | n/a | insert value |
| Frame Material | COBie Guide | n/a | insert value |
| Frame Finish | COBie Guide | n/a | insert value |
| Frame Head | COBie Guide | n/a | insert value |
| Frame Jam | COBie Guide | n/a | insert value |
| Frame Sill | COBie Guide | n/a | insert value |
| Fire Label Rating | UFGS 2.7 | n/a | 20 minute - 45 minute - 60 minute - 90 minute |
| Hardware Set | COBie Guide | n/a | insert value |
| Pressurization | COBie Guide | n/a | insert value |
| Egress Door | COBie Guide | n/a | insert value |
| Door Actuation | UFGS 2.3 | n/a | Pneumatic - Electric |
| Door Operation | UFGS 2.3 | n/a | Single-Slide - Center Parting |

| UFGS Section and Date | UFGS MAY 2012 | 08 13 73 | SLIDING METAL DOORS 02/11 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 19 | Sliding Metal Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Door Width | COBie Guide | mm (in) | 762 mm (30 in) - 914 mm (36 in) - 1066 mm (42 in) |
| Door Height | COBie Guide | mm (in) | 2032 mm (80 in) - 2133 mm (84 in) - 2438 mm (96 in) |
| Door Thickness | COBie Guide | mm (in) | 44.5 mm (1.75 in) |
| Door Type, Standard | UFGS 2.3 | n/a | Steel-Covered Composite - Hollow-Metal - Corrugated Sheet Metal - Tin-Clad |
| Door Type, Custom | COBie Guide | n/a | insert value |
| Door Material | COBie Guide | n/a | |
| Exterior Door Finish | UFGS 2.9 | n/a | Galvanized |
| Interior Door Finish | UFGS 2.9 | n/a | Galvanized - Shop Primed |
| Glazing Type | COBie Guide | n/a | |
| Frame Type | COBie Guide | n/a | |
| Frame Material | COBie Guide | n/a | |
| Frame Finish | COBie Guide | n/a | |
| Frame Head | COBie Guide | n/a | insert value |
| Frame Jam | COBie Guide | n/a | insert value |
| Frame Sill | COBie Guide | n/a | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|-------------|--|
| Fire Label Rating | UFGS 2.3 | n/a | 3/4 hour - 1 1/2 hour - 3 hour - 4 hour |
| Hardware Set | COBie Guide | n/a | insert value |
| Pressurization | COBie Guide | n/a | insert value |
| Egress Door | COBie Guide | n/a | insert value |
| Door Actuation | UFGS 1.2.1.1 | n/a | Manual - electric - pneumatic |
| Door Operation | UFGS 1.2.1.1 | n/a | Single-Slide - Center Parting |
| Closer Type | UFGS 2.5 | n/a | counterweight closing with weight boxes - cable reel closer - controlled speed cable reels |
| Locking Device | UFGS 2.8 | n/a | heavy-duty hasp and staple - electric solenoid lock |
| UFGS Section and Date | UFGS MAY 2012 | 08 14 00 | WOOD DOORS 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 15 | Wood Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Door Width | COBie Guide | mm (in) | 762 mm (30 in) - 914 mm (36 in) - 1066 mm (42 in) |
| Door Height | COBie Guide | mm (in) | 2032 mm (80 in) - 2133 mm (84 in) - 2438 mm (96 in) |
| Door Thickness | COBie Guide | mm (in) | 44.5 mm (1.75 in) |
| Door Type, Standard | UFGS 2.1 | n/a | stile and rail - flush - x-ray resistant |
| Door Type, Custom | COBie Guide | n/a | insert value |
| Door Material | COBie Guide | n/a | insert value |
| Door Finish | UFGS 2.3.6 | n/a | factory finished - field painted - plastic laminate |
| Glazing Type | COBie Guide | n/a | insert value |
| Frame Type | COBie Guide | n/a | insert value |
| Frame Material | COBie Guide | n/a | insert value |
| Frame Finish | UFGS 2.3.6 | n/a | factory finished - field painted - plastic laminate |
| Frame Head | COBie Guide | n/a | insert value |
| Frame Jam | COBie Guide | n/a | insert value |
| Frame Sill | COBie Guide | n/a | insert value |
| Fire Label Rating | UFGS 2.1.7 | n/a | 3/4 hour - 1 1/2 hour - 3 hour - 4 hour |
| Hardware Set | COBie Guide | n/a | insert value |
| Pressurization | COBie Guide | n/a | insert value |
| Egress Door | COBie Guide | n/a | insert value |
| Door Operation | UFGS 2.1 | n/a | swinging - bi-fold - sliding |
| Door Core | UFGS 2.1.2 | n/a | tempered hardboard - medium density overlaid hardwood veneer |
| X-Ray Resistant | UFGS 2.1.5 | n/a | yes - no |
| Acoustical Rating | UFGS 2.1.6 | STC | 35 - 40 |
| Louver Type | UFGS 2.2.1 | n/a | slat - sightproof inverted vee slat |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 22 20 | FIBERGLASS REINFORCED PLASTIC (FRP) DOORS AND FRAMES 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 19 11 | Fiberglass Composite Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Door Width | COBie Guide | mm (in) | 762 mm (30 in) - 914 mm (36 in) - 1066 mm (42 in) |
| Door Height | COBie Guide | mm (in) | 2032 mm (80 in) - 2133 mm (84 in) - 2438 mm (96 in) |
| Door Thickness | COBie Guide | mm (in) | 44.5 mm (1.75 in) |
| Door Type, Standard | UFGS 2.2.1 | n/a | swing - sliding |
| Door Type, Custom | COBie Guide | n/a | insert value |
| Door Material | COBie Guide | n/a | insert value |
| Door Finish | COBie Guide | n/a | insert value |
| Glazing Type | COBie Guide | n/a | insert value |
| Frame Type | COBie Guide | n/a | insert value |
| Frame Material | COBie Guide | n/a | insert value |
| Frame Finish | COBie Guide | n/a | insert value |
| Frame Head | COBie Guide | n/a | insert value |
| Frame Jam | COBie Guide | n/a | insert value |
| Frame Sill | COBie Guide | n/a | insert value |
| Fire Label Rating | UFGS 2.2.2 | n/a | 20 minute - 45 minute - 60 minute - 90 minute |
| Hardware Set | COBie Guide | n/a | insert value |
| Pressurization | COBie Guide | n/a | insert value |
| Egress Door | COBie Guide | n/a | insert value |
| Flame Spread Rating | UFGS 2.1.3 | n/a | 25 or less |
| Astragal | UFGS 2.2.1.1 | n/a | yes - no |
| Structural Performance | UFGS 2.4.1 | kPa | 1.4 |
| Air Infiltration | UFGS 2.4.2 | n/a | 2.63 by 10-5 at 0.30 kPa |
| Water Penetration | UFGS 2.4.3 | n/a | No penetration at 0.38 kPa |
| UFGS Section and Date | UFGS MAY 2012 | 08 32 13 | ALUMINUM SLIDING GLASS DOORS 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 23 13 | Sliding All Glass Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------------|--|
| Door Width | COBie Guide | mm (in) | 762 mm (30 in) - 914 mm (36 in) - 1066 mm (42 in) |
| Door Height | COBie Guide | mm (in) | 2032 mm (80 in) - 2133 mm (84 in) - 2438 mm (96 in) |
| Door Thickness | COBie Guide | mm (in) | 44.5 mm (1.75 in) |
| Door Type, Standard | UFGS 2.1 | n/a | SGD-R15 - SGD-C20 - SGD-HC40 |
| Door Type, Custom | COBie Guide | n/a | insert value |
| Door Material | COBie Guide | n/a | insert value |
| Door Finish | UFGS 2.1.5 | n/a | AA-M-10-C22-A31 - AA-M-10-C22-A41 |
| Glazing Type | UFGS 2.1.3 | n/a | Kind FT, Condition A, Type I or II, Class 1, Quality q3, not less than 6 mm thick |
| Frame Type | COBie Guide | n/a | insert value |
| Frame Material | COBie Guide | n/a | insert value |
| Frame Finish | COBie Guide | n/a | insert value |
| Frame Head | COBie Guide | n/a | insert value |
| Frame Jam | COBie Guide | n/a | insert value |
| Frame Sill | COBie Guide | n/a | insert value |
| Fire Label Rating | COBie Guide | n/a | insert value |
| Hardware Set | COBie Guide | n/a | insert value |
| Pressurization | COBie Guide | n/a | insert value |
| Egress Door | COBie Guide | n/a | insert value |
| Locking Mechanism | UFGS 2.1.1 | n/a | inside latch only - lock on outside and thumb-turn inside - lock both sides |
| Glazing Method | UFGS 2.1.2 | n/a | single glazed - double glazed |
| Screen Material | UFGS 2.1.4 | n/a | aluminum - fiberglass |
| UFGS Section and Date | UFGS MAY 2012 | 08 33 13 | METAL ROLLING COUNTER DOORS 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 25 11 | Roller Shutter Overhead Metal Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Curtain | UFGS 2.2 | n/a | aluminum - stainless steel - galvanized steel |
| Jamb Guides | UFGS 2.2 | n/a | aluminum - stainless steel - galvanized steel |
| Counterbalance Rating | UFGS 2.2 | n/a | 7500 cycles |
| Hood | UFGS 2.2 | n/a | aluminum - stainless steel - galvanized steel |
| Fire Rating | UFGS 2.4 | n/a | None - Class A - Class B - Class C - Class D |
| Closing Device | UFGS 2.6 | n/a | none - fusible link - integrated |
| Finish | UFGS 2.7 | n/a | clear anodized - no. 4 brushed - prime coat - factory finish |
| Operation | UFGS 3.1 | n/a | push up - crank - motor |
| UFGS Section and Date | UFGS MAY 2012 | 08 33 23 | OVERHEAD COILING DOORS 07/07 |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 25 11 | Roller Shutter Overhead Metal Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Curtain | UFGS 2.3.1 | n/a | aluminum - stainless steel - galvanized steel |
| Thermal Resistance | UFGS 2.3.3 | R Value | 4 |
| Overhead Drum | UFGS 2.3.10 | n/a | aluminum - stainless steel - galvanized steel |
| Jamb Guides | UFGS 2.4.1 | n/a | steel channels - steel angles - stainless steel channels - stainless steel angles |
| Hood | UFGS 2.4.3 | n/a | aluminum - stainless steel - galvanized steel |
| Operation | UFGS 2.6/2.7 | n/a | push up - crank - motor |
| Fire Rating | UFGS 2.8 | n/a | None - Class A - Class B - Class C - Class D |
| UFGS Section and Date | UFGS MAY 2012 | 08 34 01 | FORCED ENTRY RESISTANT COMPONENTS 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 49 15 | Forced Entry and Ballistic Resistant Door |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Threat Level | UFGS 1.4 | n/a | Insert Value |
| Fire Rating | UFGS 2.3.1 | n/a | None - Class A - Class B - Class C - Class D |
| Acoustical Rating | UFGS 2.3.2 | STC | Insert Value |
| Lock Type | UFGS 2.3.6.1 | n/a | series 1000, operational grade 1, security grade 1 or 1A |
| Hinge Type | UFGS 2.3.6.2 | n/a | Grade 1 removable pin - Grade 1 non-removable pin |
| Closer Type | UFGS 2.3.6.4 | n/a | Grade 1 |
| Door Stop Type | UFGS 2.3.6.5 | n/a | floor mounted - wall mounted - overhead surface mounted |
| Louver NFVA | UFGS 2.4 | percent | 17 - 39 |
| Glazing Material | UFGS 2.5.3 | n/a | laminated glass - acrylic plastic - polycarbonate plastic - glass/plastic |
| UFGS Section and Date | UFGS MAY 2012 | 08 34 02 | BULLET-RESISTANT COMPONENTS 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 49 17 | Ballistic Resistant Door |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------|--------------|---------|---|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Threat Level | UFGS 1.4 | n/a | Insert Value |
| Fire Rating | UFGS 2.3.1 | n/a | None - Class A - Class B - Class C - Class D |
| Acoustical Rating | UFGS 2.3.2 | STC | Insert Value |
| Lock Type | UFGS 2.3.6.1 | n/a | series 1000, operational grade 1, security grade 1 or 1A |
| Hinge Type | UFGS 2.3.6.2 | n/a | Grade 1 removable pin - Grade 1 non-removable pin |
| Closer Type | UFGS 2.3.6.4 | n/a | Grade 1 |
| Door Stop Type | UFGS 2.3.6.5 | n/a | floor mounted - wall mounted - overhead surface mounted |
| Louver NFVA | UFGS 2.4 | percent | 17 - 39 |
| Glazing Material | UFGS 2.6.1 | n/a | laminated glass - acrylic plastic - polycarbonate plastic - glass/plastic |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 34 16.10 | STEEL SLIDING HANGAR DOORS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 41 | Hanger Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Wind Load | UFGS 1.2.4 | kPa | 1.54 |
| Door Exterior Covering | UFGS 2.1 | n/a | sheet steel - galvanized steel - pre-formed siding |
| Door Interior Covering | UFGS 2.1 | n/a | sheet steel - galvanized steel - pre-formed siding |
| U Value | UFGS 2.1.7 | n/a | Insert Value |
| Acoustical Rating | UFGS 2.1.7 | STC | Insert Value |
| Personnel Door | UFGS 2.1.9 | n/a | yes - no |
| Door Operation | UFGS 2.3 | n/a | unidirectional - biparting - as noted |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 34 16.20 | VERTICAL LIFT FABRIC DOORS 10/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 41 | Hanger Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Wind Load | UFGS 1.2.4 | kPa | Insert Value |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------------|--|
| Operation Speed | UFGS 1.4.3 | mm/sec | 127 |
| Door Fabric | UFGS 2.1.5 | g/m2 | Insert Value |
| Personnel Door | UFGS 2.8 | n/a | yes - no |
| UFGS Section and Date | UFGS MAY 2012 | 08 34 16 | CORROSION CONTROL HANGAR DOORS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 41 | Hanger Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Design Load | UFGS 1.6.3 | kg | 22.7 |
| Door Exterior Covering | UFGS 2.1 | n/a | pre-formed siding |
| Door Interior Covering | UFGS 2.1 | n/a | aluminum |
| Personnel Door | UFGS 2.1.9 | n/a | yes - no |
| UFGS Section and Date | UFGS MAY 2012 | 08 34 19.10 20 | ROLLING SERVICE [AND FIRE] DOORS 02/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 25 11 | Roller Shutter Overhead Metal Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Operating Cycles | UFGS 2.1.1 | cycles / day | 10 |
| Curtain | UFGS 2.2.1 | n/a | aluminum - stainless steel - galvanized steel - steel |
| Thermal Resistance | UFGS 2.2.1 | R Value | Insert Value |
| Hood | UFGS 2.4.3 | n/a | aluminum - stainless steel - galvanized steel |
| Operation | UFGS 2.3/2.4 | n/a | push up - chain - crank - motor |
| Fire Rating | UFGS 2.6 | n/a | None - Class A - Class B - Class C - Class D |
| UFGS Section and Date | UFGS MAY 2012 | 08 34 49.00 20 | HEMP SHIELDED DOOR 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 37 15 21 | High Energy Magnetic Pulse Protection Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|---------|--|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Shielding Attenuation | UFGS 1.2.3 | n/a | SE = 20 log(Vc/Vm) |
| Door Material | UFGS 2.1 | n/a | Steel |
| Door Operation | UFGS 2.1 | n/a | swinging - sliding |
| Door Operating Force | UFGS 2.3.1 | Newtons | 156 |
| Shielded | UFGS 2.9.6 | n/a | yes - no |

| UFGS Section and Date | UFGS MAY 2012 | 08 34 53 | SECURITY DOORS AND FRAMES 08/08 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 49 | Security Rated Door |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Fire Rating | UFGS 2.2 | n/a | None - 6 hour - 4 hour - 2 hour |
| Day Gate | UFGS 2.4 | n/a | yes - no |

| UFGS Section and Date | UFGS MAY 2012 | 08 34 59 | VAULT DOORS AND DAY GATES 08/08 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 35 21 15 | Vault Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Fire Rating | UFGS 2.2 | n/a | None - 6 hour - 4 hour - 2 hour |
| Day Gate Type | UFGS 2.3 | n/a | standard - custom |

| UFGS Section and Date | UFGS MAY 2012 | 08 34 63 | DETENTION HOLLOW METAL FRAMES, DOORS, AND DOOR FRAMES 05/11 |
|--------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 39 | Detention Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|------|--|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Door Material | UFGS 2.2.1 | n/a | cold rolled pickled steel |
| Opening Provisions | UFGS 2.4 | n/a | Speaking ports - Louvers - View ports - Food passes |

| UFGS Section and Date | UFGS MAY 2012 | 08 34 73 | SOUND CONTROL DOOR ASSEMBLIES 05/12 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 37 13 | Sound Control Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | reduced emissions - regional - low voc - low toxicity - recycled content |
| Door Construction | UFGS 1.3.1 | n/a | Category A - Category B |
| Acoustical Rating | UFGS 2.2 | STC | 25 - 30 - 35 - 40 - 45 |
| Fire Rating | UFGS 2.3/2.4 | n/a | None - Class A - Class B - Class C - Class D |
| Door Finish | UFGS 2.3/2.4 | n/a | Insert Value |
| Vision Panels | UFGS 2.8 | n/a | none - acoustical plate glass |
| Threshold Material | UFGS 2.10 | n/a | metal - hardwood |
| Astragal | UFGS 2.11 | n/a | yes - no |

| UFGS Section and Date | UFGS MAY 2012 | 08 36 13 | SECTIONAL OVERHEAD DOORS 08/11 |
|------------------------------|---------------|-------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 25 13 | Sectional Overhead Metal Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Door Designation | UFGS 2.2 | n/a | Residential - Commercial |
| Wind Load | UFGS 2.3 | kPa | 0.96 |
| Door Material | UFGS 2.4 | n/a | Steel - Aluminum |
| U Value | UFGS 2.4.1.1 | n/a | maximum 0.14 |
| Operation | UFGS 2.5/2.5 | n/a | pushup - chain hoist - motor |
| Door Finish | UFGS 2.8 | n/a | galvanized and shop primed - anodized |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 36 19 | VERTICAL LIFT DOORS 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 13 25 | Overhead Metal Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Wind Load | UFGS 2.2 | kPa | 1 |
| Door Material | UFGS 2.4 | n/a | Steel - Aluminum |
| Operation | UFGS 2.3/2.4 | n/a | pushup - chain hoist - motor |
| Door Finish | UFGS 2.6 | n/a | galvanized and shop primed - anodized |
| UFGS Section and Date | UFGS MAY 2012 | 08 39 53 | BLAST RESISTANT DOORS (OVAL ARCH MAGAZINES) 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 49 11 | Blast Resistant Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Operation | UFGS 2.3 | n/a | manual |
| Door Finish | UFGS 2.6 | n/a | galvanized and shop primed |
| UFGS Section and Date | UFGS MAY 2012 | 08 39 54 | BLAST RESISTANT DOORS 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 49 11 | Blast Resistant Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - reduced emissions - regional - low voc - low toxicity - recycled content |
| Hinge Type | UFGS 2.2.1 | n/a | type 1 - type 2 - type 3 |
| Latching | UFGS 2.2.2 | n/a | jamb - multi-point |
| Handle Type | UFGS 2.2.2.7 | n/a | handle - wheel - wheel-and-spoke |
| U Value | UFGS 2.4.3 | n/a | maximum 1.36 |

| Attribute | Source | Unit | Value |
|------------------------------|-------------------------|----------------------|---|
| Door Operating Force | UFGS 2.5.1.7/2.5.3.5 | Newtons | 90 - 135 - 180 |
| Door Type | UFGS 2.5.2.1/2.5.3.1 | n/a | Structural Steel - double structural steel - reinforced concrete - double reinforced concrete |
| Air Infiltration | UFGS 2.6.4 | n/a | 90 L/s at 76.7 Pa |
| Acoustical Rating | UFGS 2.6.5 | STC | Insert Value |
| Fire Rating | UFGS 2.6.6 | n/a | None - Class A - Class B - Class C - Class D |
| UFGS Section and Date | UFGS MAY 2012 | 08 41 13 | ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 33 21 11 | Aluminum-Framed Entrances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Air Infiltration | UFGS 2.1.2 | n/a | 0.0017 cubic meters/square meter |
| Wind Loads | UFGS 2.1.2 | n/a | Insert Value |
| U Value | UFGS 2.1.2.4 | n/a | Insert Value |
| CRF | UFGS 2.1.2.4 | n/a | Insert Value |
| Water Infiltration | UFGS 2.1.2.5 | n/a | No infiltration at 956 Pa |
| UFGS Section and Date | UFGS MAY 2012 | 08 44 00 | CURTAIN WALL AND GLAZED ASSEMBLIES 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 33 27 11 15 | Translucent Curtain Wall Assemblies |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Deflection | UFGS 1.4.3.1 | n/a | Insert Value |
| Water Penetration | UFGS 1.4.3.2 | n/a | No infiltration at 0.19 kPa |
| Air Infiltration | UFGS 1.4.3.3 | n/a | 0.005 cubic meters/square meter |
| System Design | UFGS 1.5.2 | n/a | unit system - unit and mullion system - insert value |
| Wind Loads | UFGS 1.1.1.2 | n/a | Insert Value |
| Glass Type | UFGS 2.1.1.1 | n/a | Float Glass - Heat-Absorbing Glass - insulating glass - spandrel glass |
| Panel Type | UFGS 2.1.1.6 | n/a | metal - adhesive bonded - non-metallic |
| Window Type | UFGS 2.1.1.7 | n/a | fixed - double hung - projected - vertically pivoted - horizontally pivoted - sliding |
| Frame Finish | UFGS 2.4.5 | n/a | Insert Value |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|-------------|--|
| U Value | UFGS 2.8.6 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 08 51 13 | ALUMINUM WINDOWS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 13 | Metal Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.7 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Window Number | COBie Guide | n/a | Insert Value |
| Security Code | COBie Guide | n/a | Insert Value |
| Window Rating | COBie Guide | n/a | Insert Value |
| Glazing Type | COBie Guide | n/a | Insert Value |
| Window Size - Length | COBie Guide | mm (in) | Insert Value |
| Window Size - Height | COBie Guide | mm (in) | Insert Value |
| Window Size - Width | COBie Guide | mm (in) | Insert Value |
| Window Operation | COBie Guide/UFGS 2.1 | n/a | AP - C - H - HS - AP - TH - VP - F |
| Frame Material | COBie Guide | n/a | Insert Value |
| U-Factor | COBie Guide | n/a | Insert Value |
| Structural Performance | UFGS 1.11.1 | n/a | Insert Value |
| Anti-Terrorism Performance | UFGS 1.11.2 | n/a | Insert Value |
| Air Infiltration | UFGS 1.11.3 | n/a | Insert Value |
| Water Penetration | UFGS 1.11.4 | n/a | Insert Value |
| Thermal Performance | UFGS 1.11.5 | n/a | Insert Value |
| AAMA Rating | UFGS 2.1 | n/a | Insert Value |
| Finish | UFGS 2.2.9 | n/a | anodic - organic |
| UFGS Section and Date | UFGS MAY 2012 | 08 51 23 | STEEL WINDOWS 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 13 | Metal Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.5 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Air Infiltration | UFGS 1.3.1 | n/a | 0.05 cubic meter per minute per meter |
| Water Penetration | UFGS 1.3.1 | n/a | No infiltration at 75 Pa |
| Structural Performance | UFGS 1.3.2 | n/a | 958 Pa |

| Attribute | Source | Unit | Value |
|-----------------|-----------|------|---|
| Finish | UFGS 2.8 | n/a | shop primed - factory finished |
| Window Type | UFGS 2.9 | n/a | awning ventilator - casement - hopper ventilator - continuous - fixed - horizontally pivoted - projected - security |
| Window Category | UFGS 2.9 | n/a | standard intermediate - heavy intermediate - heavy custom |
| Operation | UFGS 2.11 | n/a | manual - pole - crank - mechanical - chain - steel shaft |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 51 69.10 | ALUMINUM STORM WINDOWS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 13 | Metal Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Window Type | UFGS 2.1.2 | n/a | FEW - HWE - VWE - SGE |
| Finish | UFGS 2.3 | n/a | anodic - organic |

| | | | |
|------------------------------|----------------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 52 00 | WOOD WINDOWS 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 15 | Wood Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf |
| Window Material | UFGS 2.1 | n/a | Virgin Lumber - Engineered Wood |
| Window Type | UFGS 2.2 | n/a | Shingle Hung - Double Hung - Awning - Casement - Horizontal Sliding - Stationary |
| Window Finish | UFGS 2.4 | n/a | paint - PVC clad - aluminum clad |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 52 70 | WOOD WINDOWS - REPAIR AND REHABILITATION 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 15 | Wood Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf |

| Attribute | Source | Unit | Value |
|-------------------------------------|----------------------|----------------------|---|
| Glazing Compound | UFGS 2.6 | n/a | oil based - silicone |
| Wood Consolidant Type | UFGS 2.8 | n/a | Liquid - Paste |
| UFGS Section and Date | UFGS MAY 2012 | 08 53 00 | PLASTIC WINDOWS 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 17 | Plastic Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | regional - low voc - low toxicity |
| Condensation Resistance Factor | UFGS 2.1 | n/a | Insert Value |
| Solar Heat Gain Coefficient | UFGS 2.1 | n/a | Insert Value |
| U Value | UFGS 2.1 | n/a | Insert Value |
| Glass Type | UFGS 2.2.3 | n/a | Insert Value |
| Window Type | UFGS 2.3 | n/a | Awning - Casement - Hung - Sliding - Projected - Fixed |
| Performance Class | UFGS 2.3.7.3 | n/a | R15 - Insert Value |
| Design Pressure | UFGS 2.4.1 | n/a | 72 - 96 - 192 |
| UFGS Section and Date | UFGS MAY 2012 | 08 56 46.10 20 | RADIO FREQUENCY SHIELDED ENCLOSURES, DEMOUNTABLE TYPE 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 27 17 13 15 | Radio Frequency Protection Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Magnetic Interference Attenuation | UFGS 2.1.1 | n/a | 60 dB at 14 kHz increasing linearly to 100 dB |
| Electric Interference Attenuation | UFGS 2.1.1 | n/a | 100 dB from 1 kHz to 50 MHz |
| Plane Wave Interference Attenuation | UFGS 2.1.1 | n/a | 100 dB between 50 MHz and 10 GHz |
| Acoustical Rating | UFGS 2.1.2 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 08 56 46.20 20 | RADIO FREQUENCY SHIELDED ENCLOSURES, WELDED TYPE 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 27 17 13 15 | Radio Frequency Protection Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|-------------------------------------|-------------|------|---|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Magnetic Interference Attenuation | UFGS 2.1.1 | n/a | 60 dB at 14 kHz increasing linearly to 100 dB |
| Electric Interference Attenuation | UFGS 2.1.1 | n/a | 100 dB from 1 kHz to 50 MHz |
| Plane Wave Interference Attenuation | UFGS 2.1.1 | n/a | 100 dB between 50 MHz and 10 GHz |
| Acoustical Rating | UFGS 2.1.2 | n/a | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 08 56 53 | BLAST RESISTANT TEMPERED GLASS WINDOWS 08/11 |
|------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 29 13 | Blast Resistant Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Glass Type | UFGS 2.3 | n/a | Grade B, Style I, Type 2 Class 1 - Grade B, Style I, Type 2 Class 2 |
| Finish | UFGS 2.5.1.1 | n/a | anodic - organic |
| Static Design Resistance | UFGS 2.6.1.2 | kPa | insert value |

| UFGS Section and Date | UFGS MAY 2012 | 08 56 63 | DETENTION AND SECURITY WINDOWS 04/06 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 13 27 13 | Detention Windows |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Air Infiltration | UFGS 1.3.1 | n/a | 0.8 L/s per meter at 75 Pa |
| Water Penetration | UFGS 1.3.1 | n/a | No infiltration at 75 Pa |
| Structural Performance | UFGS 1.3.2 | Pa | 960 |
| Finish | UFGS 2.8 | n/a | shop primed |
| Window Type | UFGS 2.9 | n/a | fixed |

| UFGS Section and Date | UFGS MAY 2012 | 08 60 45 | [SKYLIGHTS][AND][TRANSLUCENT PANELS] 02/12 |
|--------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 17 00 | Skylights |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Panel Type | UFGS 2.1 | n/a | glass fiber reinforced polyester - extruded cellular thermoplastic polycarbonate |
| Fire Rating | UFGS 2.3 | n/a | Class A =Class B - Class C |
| Condensation Index | UFGS 2.4.4 | n/a | insert value |
| Air Infiltration | UFGS 2.5 | n/a | less than 0.2 L/s per meter at 75 Pa |
| Water Penetration | UFGS 2.5 | n/a | No infiltration at 718 Pa |
| Impact Resistance | UFGS 2.5 | N-m | 68 - 271 |
| Live Load | UFGS 2.5 | n/a | insert value |
| Dead Load | UFGS 2.5 | n/a | insert value |
| UFGS Section and Date | UFGS MAY 2012 | 08 71 00 | DOOR HARDWARE 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 19 11 | Hardware for Doors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Hardware Item Category | UFGS 2.3 | n/a | Hinge - Protection Device - Pivot - Lock - Latch - Exit Device - Closer - Insert Value |
| Hardware Item Type | UFGS 2.3 | n/a | Insert Value |
| Hardware Item Grade | UFGS 2.3 | n/a | Insert Value |
| Keying System | UFGS 2.3.8 | n/a | great master - grand master - existing - none |
| BHMA Finish | UFGS 2.5 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 08 71 63.10 | ELECTRICAL LOCKING CONTROL FOR BRIGS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 19 11 21 | Door Barrier Locks |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Control Panel Type | UFGS 2.1/2.2/2.5 | n/a | Locking - Graphic Locking - Linear Locking - |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|--|
| Voltage | UFGS 2.4.4 | n/a | 120 VAC - 24VDC - 24VAC |
| UFGS Section and Date | UFGS MAY 2012 | 08 71 63 | DETENTION HARDWARE 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 19 11 21 | Door Barrier Locks |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity |
| Hinge Type | UFGS 2.4 | n/a | A8191 HT - A8192 HT |
| Lock Type | UFGS 2.5 | n/a | Type 1 - Type 2 - Type 3 - Type 4 - Type 5 - Type 6 - Type 7 |
| Closer Type | UFGS 2.6 | n/a | Type 1 - Type 2 |
| Door Stop Type | UFGS 2.8 | n/a | PH1 - PH2 - OH3 - FS1 - FS2 - FS3 |
| Door Position Switch Type | UFGS 2.10 | n/a | Type 1 - Type 2 |
| UFGS Section and Date | UFGS MAY 2012 | 08 81 00 | GLAZING 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 15 00 | Glazing |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | regional - low voc - low toxicity |
| Glazing Type | UFGS 2.1/2.2/2.3 | n/a | Monolithic Glass - Sealed Insulated Glass - Acrylic - Polycarbonate - Bullet Resistant Plastic Sheet |
| Glass Kind | UFGS 2.1 | n/a | Clear - Annealed - Heat Absorbing - Wired - Patterned - Laminated - Bullet Resisting - Mirror - One-Way Vision - Tempered - Heat Strengthened - Spandrel |
| Glass Condition | UFGS 2.1 | n/a | A - B - Insert Value |
| Glass Type | UFGS 2.1 | n/a | I - II |
| Glass Class | UFGS 2.1 | n/a | 1 - 2 |
| Glass Quality | UFGS 2.1 | n/a | q3 |
| Thickness | UFGS 2.1/2.2/2.3 | mm | Insert Value |
| Glazing Color | UFGS 2.1/2.2/2.3 | n/a | Insert Value |
| Number of Panes | UFGS 2.1/2.2/2.3 | n/a | Insert Value |
| Airspace Depth | UFGS 2.1/2.2/2.3 | mm | 13 - 10 - 6 |
| Airspace Fill | UFGS 2.1/2.2/2.3 | n/a | Argon - Krypton - Air |
| Acoustical Rating | UFGS 2.1/2.2/2.3 | STC | 26 - 30 - 35 |
| U Value | UFGS 2.1/2.2/2.3 | n/a | Insert Value |
| Solar Heat Gain Coefficient | UFGS 2.1/2.2/2.3 | n/a | Insert Value |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 08 87 16 | FRAGMENT RETENTION FILM FOR GLASS 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 15 25 13 | Safety Films |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Film Thickness | UFGS 2.2 | mm | 0.1 - 0.18 - 0.25 |
| Tensile Strength | UFGS 2.2 | mPa | 172.4 |
| Peel Strength | UFGS 2.2 | N/m | 930 - 790 |
| Surface Abrasion | UFGS 2.2 | n/a | less than 3.2 percent |
| Flame Spread | UFGS 2.2 | n/a | 25 |
| Smoke Density | UFGS 2.2 | n/a | 100 |
| UFGS Section and Date | UFGS MAY 2012 | 08 88 53 | DETENTION AND SECURITY GLAZING 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 15 19 11 | Security Glazing |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Glazing Assembly Type | UFGS 2.1 | n/a | Glass-Clad Polycarbonate - Plastic Laminated - Glass Laminated |
| Glazing Material | UFGS 2.2 | n/a | Chemically Strengthened Glass - Annealed Wired Glass - Polycarbonate |
| Glazing Type | UFGS 2.3 | n/a | 1 - 2 - 3 - 4 - 4W - 5 - 5W - 6 |
| UFGS Section and Date | UFGS MAY 2012 | 08 91 00 | METAL [WALL] [AND] [DOOR] LOUVERS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 11 11 25 21 | Door Louvers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Louver Material | UFGS 2.2 | n/a | Aluminum - Galvanized Steel - Stainless Steel |

| Attribute | Source | Unit | Value |
|-------------------|--------------|------|---|
| Louver Type | UFGS 2.2/2.3 | n/a | Wall - Door |
| Wind Load | UFGS 2.2 | kPa | 1.44 |
| Water Penetration | UFGS 2.2 | n/a | 0.06 kilograms or less per square meter |
| NFVA | UFGS 2.2 | n/a | Insert Value |
| Louver Finish | UFGS 2.5 | n/a | anodic - organic |

| UFGS Section and Date | UFGS MAY 2012 | 09 06 90 | COLOR SCHEDULE 05/09 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 00 00 | Interior and Finish Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |

| UFGS Section and Date | UFGS MAY 2012 | 09 22 00 | SUPPORTS FOR PLASTER AND GYPSUM BOARD 02/10 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 11 11 | Gypsum Board Fixed Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Material | UFGS 2.1 | n/a | Galvanized Steel |
| Material Thickness | UFGS 2.1 | gage | 25 - 22 - 20 |
| Component Type | UFGS 2.1 | n/a | Furring - Lathing - Z-Channel - Clip |

| UFGS Section and Date | UFGS MAY 2012 | 09 22 36 | LATH 01/08 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 17 17 | Lath |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Material | UFGS 2.1 | n/a | Galvanized Steel |
| Material Thickness | UFGS 2.1 | gage | 25 - 22 - 20 |
| Lath Type | UFGS 2.1 | n/a | diamond mesh - self-furring diamond mesh - flat rib - sheet - welded wire |
| Lath Weight | UFGS 2.1 | kg/m2 | Insert Value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|-------------------|--|
| Backing | UFGS 2.1 | n/a | paper backed - foil backed - no backing - fire resistant |
| UFGS Section and Date | UFGS MAY 2012 | 09 23 00 | GYPSUM PLASTERING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 11 13 11 | Gypsum Plaster Fixed Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3.2 | n/a | regional - low voc - low toxicity |
| Base Coat | UFGS 2.2 | n/a | neat - ready mixed - wood fibered - high strength |
| Finish Coat | UFGS 2.3 | n/a | gaging - high strength gaging - keenes cement - acoustical type I acoustical type II |
| Proportioning | UFGS 2.7 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 09 23 82 | FIREPROOF GYPSUM PLASTERING 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 11 13 11 | Gypsum Plaster Fixed Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Fire Rating | UFGS 1.5.4 | n/a | 4 hour |
| Flame Spread | UFGS 2.1 | n/a | 10 |
| Fuel Contributed | UFGS 2.1 | n/a | 5 |
| Smoke Developed | UFGS 2.1 | n/a | 0 |
| UFGS Section and Date | UFGS MAY 2012 | 09 24 23 | STUCCO 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 11 13 13 | Portland Cement Plaster Fixed Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Portland Cement Type | UFGS 2.1 | n/a | gray I - gray II - gray III - white I - white II - white III |

| Attribute | Source | Unit | Value |
|------------------------------|--------------------------|----------------|---|
| Accessory Material | UFGS 2.5 | n/a | Galvanized Steel - PVC |
| Lath Type | UFGS 2.1 | n/a | diamond mesh - self-furring diamond mesh - flat rib - sheet - welded wire |
| Lath Weight | UFGS 2.1 | kg/m2 | Insert Value |
| Backing | UFGS 2.1 | n/a | paper backed - foil backed - no backing - fire resistant |
| UFGS Section and Date | UFGS MAY 2012 | 09 26 00 | VENEER PLASTER 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 11 13 | Plaster Fixed Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4 | n/a | regional - low voc - low toxicity |
| Gypsum Backing Board | UFGS 2.1.3 | n/a | Regular - Foil-backed - Water-Resistant - Type X |
| Gypsum Base | UFGS 2.1.4 | n/a | Regular - Foil-backed - Type X |
| Compressive Strength | UFGS 2.1.5 | mPa | 17 |
| Accessory Material | UFGS 2.1.10 | n/a | Galvanized Steel - PVC |
| UFGS Section and Date | UFGS MAY 2012 | 09 29 00 | GYPSUM BOARD 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 11 11 | Gypsum Board Fixed Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3/1.6 | n/a | regional - low voc - low toxicity - recycled content |
| Board Type | UFGS 2.1 | n/a | regular - foil backed - type X - water resistant -water resistant type X |
| Backer Type | UFGS 2.1 | n/a | regular - foil backed - type X |
| Facer | UFGS 2.1.5 | n/a | paper - glass mat |
| Impact Resistant | UFGS 2.1.6 | n/a | yes - no |
| Predecorated | UFGS 2.1.7 | n/a | yes - no |
| Fastening method | UFGS 2.1.10 | n/a | nails - screws - staples - adhesive |
| Accessory Material | UFGS 2.1.14 | n/a | Galvanized Steel - PVC |
| UFGS Section and Date | UFGS MAY 2012 | 09 30 00 | CERAMIC TILE, QUARRY TILE, AND PAVER TILE 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 13 13 | Tile Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|------|---|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.2.3 | n/a | regional - low voc - low toxicity - recycled content |
| Tile Class | UFGS 2.1 | n/a | Class 0 - class I - class II - class III - class IV - class IV Plus |
| Tile Type | UFGS 2.1 | n/a | mosaic - quarry - paver - detectablewatning - porcelain - glazed wall - stone |
| Mortar Type | UFGS 2.4 | n/a | Dry-Set Portland Cement - Conductive Dry-Set - Latex-Portland Cement |
| Grout Type | UFGS 2.4 | n/a | sand portland cement grout - dry-set grout - latex-portland cement grout - commercial portland cement grout - epoxy resin - furan resin |
| VOC Limit | UFGS 2.4 | g/l | Insert Value |
| Backer Panel | UFGS 2.4 | n/a | cementitious - glass mat gypsum |

| UFGS Section and Date | UFGS MAY 2012 | 09 35 16 | CHEMICAL-RESISTANT QUARRY TILE 08/10 |
|------------------------------|----------------------|-------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 13 13 15 | Quarry Tile Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity |
| Tile Type | UFGS 2.1 | n/a | quarry - slip-resistant quarry |
| Mortar Type | UFGS 2.1 | n/a | furan - epoxy |
| Grout Type | UFGS 2.1 | n/a | furan - epoxy |
| Chemical Resistance | UFGS 2.2.1 | g/l | No Change after subject to specified chemical attack |

| UFGS Section and Date | UFGS MAY 2012 | 09 51 00 | ACOUSTICAL CEILINGS 08/10 |
|------------------------------|----------------------|-------------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 19 15 11 11 | Acoustical Ceiling Tile |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.5 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Fire Rating | UFGS 1.2.1 | n/a | 1 hour - 1-1/2 hour - 2 hour - 3 hour - 4 hour |

| Attribute | Source | Unit | Value |
|-------------------------------|----------------------|-------------------|--|
| Attenuation Class | UFGS 2.1 | CAC | Insert Value |
| Noise Reduction Coefficient | UFGS 2.1 | NRC | Insert Value |
| Light Reflectance Coefficient | UFGS 2.1 | n/a | LR-1, 0.75 or greater |
| Flame Spread | UFGS 2.1 | n/a | 25 or less |
| Ceiling Unit Type | UFGS 2.1 | n/a | type I - type II - type III - type IV - type V - type VI - type VII - type VIII - type IX - type X |
| Ceiling Unit Pattern | UFGS 2.1 | n/a | A - B - C - D - E - F - G - I - J - K |
| Grid System | UFGS 2.1 | n/a | exposed - concealed |
| Nominal Panel Size | UFGS 2.1 | mm x mm | Insert Value |
| Suspension System | UFGS 2.2 | n/a | light duty - intermediate duty - heavy duty |
| UFGS Section and Date | UFGS MAY 2012 | 09 62 38 | STATIC CONTROL FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 11 15 17 | Static Resistant Floor Treatment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Flooring Type | UFGS 2.2/2.3 | n/a | conductive vinyl tile - conductive rubber tile - conductive rubber sheet flooring - Static-Dissipative Vinyl Tile - Static-Dissipative Rubber Tile - Static-Control Carpet |
| Electrical Resistance | UFGS 2.2/2.3 | ohms | Insert Value |
| Flooring Thickness | UFGS 2.2/2.3 | mm | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 09 64 00 | PORTABLE (DEMOUNTABLE) WOOD FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 19 13 | Portable Floors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Framing Members | UFGS 2.1.1 | n/a | Fir - SYP |
| Finish Flooring | UFGS 2.1.2 | n/a | hard maple 33/32 - hard maple 15/32 |
| Flooring Finish | UFGS 2.1.10 | n/a | group II - group III |
| UFGS Section and Date | UFGS MAY 2012 | 09 64 23 | WOOD PARQUET FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 13 11 23 | Wood Parquet Flooring |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------------|-------------------|---|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Flooring Type | UFGS 2.1 | n/a | laminated block - slat block - solid block |
| Flooring Material | UFGS 2.1 | n/a | hard maple - red oak - white oak - birch - ash - beech - walnut - cherry |
| Flooring Unit Dimensions | UFGS 2.1 | mm x mm | Insert Value |
| Flooring Thickness | UFGS 2.1 | mm | Insert Value |
| Flooring Grade | UFGS 2.1 | n/a | First - FAS |
| Flooring Finish | UFGS 2.1 | n/a | factory applied - field finished |
| UFGS Section and Date | UFGS MAY 2012 | 09 64 29 | WOOD STRIP FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 13 11 25 | Wood Strip Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.2.1/1.2.3 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Flooring Type | UFGS 2.1 | n/a | laminated block - slat block - solid block |
| Flooring Material | UFGS 2.1 | n/a | bamboo |
| Flooring Unit Dimensions | UFGS 2.1 | mm x mm | 19 x 55 - 26 x 55 |
| Flooring Thickness | UFGS 2.1 | mm | Insert Value |
| Flooring Grade | UFGS 2.1 | n/a | FAS |
| Flooring Finish | UFGS 2.1 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 09 64 66 | WOOD ATHLETIC FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 13 11 17 | Wood Athletic Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|-------------------|--|
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Flooring Type | UFGS 2.2.1 | n/a | strip flooring |
| Flooring Material | UFGS 2.2.1 | n/a | hard maple - birch - beech |
| Flooring Thickness | UFGS 2.2.1 | mm | Insert Value |
| Base Material | UFGS 2.2.2 | n/a | hard maple - birch - beech - molded rubber |
| Flooring Grade | UFGS 2.2.1 | n/a | First - FAS |
| Flooring Finish | UFGS 2.2.1 | n/a | factory applied - field finished |
| UFGS Section and Date | UFGS MAY 2012 | 09 65 00 | RESILIENT FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 15 | Resilient Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4 | n/a | regional - low voc - low toxicity - recycled content - biobased |
| Flooring Material | UFGS 2.1-2.7 | n/a | VCT - sheet vinyl - rubber tile - rubber sheet - solid vinyl - linoleum - linoleum tile - cork |
| Flooring Type | UFGS 2.1-2.7 | n/a | insert value |
| Flooring Thickness | UFGS 2.1-2.7 | mm | Insert Value |
| Adhesive Type | UFGS 2.14 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 09 65 66 | RESILIENT ATHLETIC FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 19 17 | Gymnasium or Dance Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 2.1.4 | n/a | regional - low voc - low toxicity - recycled content - biobased |
| Flooring Material | UFGS 2.1-2.6 | n/a | cartpe tile - rubber composition tile - rubber poured in place - sheet rubber composition - urethane poured in place |
| Flooring Type | UFGS 2.1-2.6 | n/a | Insert Value |
| Flooring Thickness | UFGS 2.1-2.6 | mm | Insert Value |
| Adhesive Type | UFGS 2.8 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 09 66 13 | PORTLAND CEMENT TERRAZZO 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 13 15 11 | Portland Cement Terrazzo Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|------|--|
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content |
| Portland Cement Type | UFGS 2.1 | n/a | type I - type II - type III - type IV - type V - type VI - type VII - type VIII - type IX - type X |
| Divider Material | UFGS 2.4 | n/a | brass - zinc - plastic |
| Sealer pH | UFGS 2.9 | n/a | between 7 and 10 |

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|------------------------------|------------------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 09 66 16 | TERRAZZO TILE 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 13 15 13 | Precast Terrazzo Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3.2 | n/a | regional - low voc - low toxicity - recycled content |
| Chip Type | UFGS 2.2 | n/a | marble - granite |
| Resin Type | UFGS 2.2 | n/a | flexible - rigid |
| Tile Thickness | UFGS 2.2 | mm | 5 |
| Flooring Unit Dimensions | UFGS 2.2 | mm x mm | 300 x 300 |
| Resilient Base Type | UFGS 2.4 | n/a | rubber - vinyl |
| Divider Material | UFGS 2.6 | n/a | aluminum |

| | | | |
|------------------------------|------------------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 09 66 23 | RESINOUS TERRAZZO FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 13 15 17 | Plastic matrix Terrazzo Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4.2 | n/a | regional - low voc - low toxicity - recycled content |
| Divider Material | UFGS 2.5 | n/a | brass - zinc - plastic |
| Sealer pH | UFGS 2.7 | n/a | between 7 and 10 |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|-------------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 09 67 23.13 | STANDARD RESINOUS FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 29 13 19 | Resinous Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Binder Matrix | UFGS 2.1.2/2.1.3 | n/a | Insert Value |
| Aggregate Type | UFGS 2.1.3 | n/a | Insert Value |
| Sealer Type | UFGS 2.1.4 | n/a | aliphatic - polyurethane |
| UFGS Section and Date | UFGS MAY 2012 | 09 67 23.14 | CHEMICAL RESISTIVE RESINOUS FLOORING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 29 13 19 | Resinous Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3.2 | n/a | regional - low voc - low toxicity - recycled content |
| Aggregate Type | UFGS 2.1.2 | n/a | silica sand - quartz - granite |
| Binder Type | UFGS 2.1.3 | n/a | synthetic rubber latex or resin emulsion - thermo-setting epoxy - medium reactive nonthixotropic modified polyester |
| Top Coating Type | UFGS 2.1.5 | n/a | Clear - Colored |
| Floor System Type | UFGS 2.2 | n/a | Latex or Resinous Emulsion Matrix - Epoxy Matrix - Polyester Matrix |
| UFGS Section and Date | UFGS MAY 2012 | 09 67 23.15 | FUEL RESISTIVE RESINOUS FLOORING, 3-COAT SYSTEM 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 29 13 19 | Resinous Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Primer Type | UFGS 2.2.1 | n/a | Epoxy Polyamine |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------------|---|
| Top Coating Type | UFGS 2.2.2 | n/a | Urethane |
| Grit Type | UFGS 2.3 | n/a | Aluminum Oxide, Sieve #60 |
| UFGS Section and Date | UFGS MAY 2012 | 09 67 23.16 | FUEL RESISTIVE RESINOUS FLOORING, 5-COAT SYSTEM 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 29 13 19 | Resinous Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Primer Type | UFGS 2.2.1 | n/a | Epoxy Polyamine |
| Grout Coating Type | UFGS 2.1.2 | n/a | Epoxy Polyamine |
| Top Coating Type | UFGS 2.2.3 | n/a | Urethane |
| Grit Type | UFGS 2.3 | n/a | Aluminum Oxide, Sieve #60 |
| UFGS Section and Date | UFGS MAY 2012 | 09 68 00 | CARPET 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 17 | Carpet Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - biobased |
| Static Control | UFGS 2.2 | kV | 3.5 - 2.0 |
| Radiant Flux | UFGS 2.2 | W/cm2 | 0.22 - 0.45 |
| Tuft Bind | UFGS 2.1 | N | 40 - 18 |
| Cushion Type | UFGS 2.1 | n/a | Rubberized hair, mothproofed and sterilized - Rubberized jute, mothproofed and sterilized - Synthetic - Resinated, recycled textile |
| Install Method | UFGS 3.4 | n/a | direct glue down - pre-applied adhesive - stretch-in |
| UFGS Section and Date | UFGS MAY 2012 | 09 69 13 | RIGID GRID ACCESS FLOORING 11/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 23 | Rigid Grid Access Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|-----------------------|------------------|------|---|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Concentrated Load | UFGS 1.2.2 | N | 4450 - 5560 - 6670 |
| Live Load | UFGS 1.2.2 | kPa | 11.97 - 14.36 - 16.76 |
| Impact Load | UFGS 1.2.2 | N | 670 |
| Rolling Load | UFGS 1.2.2 | N | 3560 - 4450 - 5340 - 5560 - 6670 |
| Panel Construction | UFGS 2.1.2 | n/a | aluminum - Hollow Formed Steel - Metal-Clad Cementitious Fill - Metal-Clad Wood Core - Lightweight Concrete Panels |
| Floor Covering | UFGS 2.1.3 | n/a | High Pressure Laminate - Conductive Surfacing - Conductive High Pressure Laminate - VCT - Carpet |
| Resilient Base Type | UFGS 2.1.6 | n/a | rubber - vinyl |
| Support System | UFGS 2.2.1/2.2.2 | n/a | pedestals - pedestals and stringers |

| UFGS Section and Date | UFGS MAY 2012 | 09 69 19 | STRINGERLESS ACCESS FLOORING 11/10 |
|------------------------------|------------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 17 27 | Stringerless Access Flooring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Concentrated Load | UFGS 1.2.2 | N | 4450 - 5560 - 6670 |
| Live Load | UFGS 1.2.2 | kPa | 11.97 - 14.36 - 16.76 |
| Impact Load | UFGS 1.2.2 | N | 670 |
| Rolling Load | UFGS 1.2.2 | N | 3560 - 4450 - 5340 - 5560 - 6670 |
| Panel Construction | UFGS 2.1.2 | n/a | aluminum - Hollow Formed Steel - Metal-Clad Cementitious Fill - Metal-Clad Wood Core - Lightweight Concrete Panels |
| Floor Covering | UFGS 2.1.3 | n/a | High Pressure Laminate - Conductive Surfacing - Conductive High Pressure Laminate - VCT - Carpet |
| Resilient Base Type | UFGS 2.1.6 | n/a | rubber - vinyl |
| Support System | UFGS 2.2.1/2.2.2 | n/a | pedestals |

| UFGS Section and Date | UFGS MAY 2012 | 09 72 00 | WALL COVERINGS 08/10 |
|------------------------------|----------------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 15 00 | Wall Coverings, Claddings, Linings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content - biobased |
| Wallcovering Type | UFGS 2.2 | n/a | vinyl - textile - acoustical - dry erase |

| Attribute | Source | Unit | Value |
|-----------------------------------|----------------------------|-------------|--|
| Wall Liner | UFGS 2.7 | n/a | none - non-woven polyester cellulose |
| UFGS Section and Date | UFGS MAY 2012 | 09 83 13 | ACOUSTICAL WALL TREATMENT 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 15 29 | Acoustical Wall Finishes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf |
| Panel Width | UFGS 2.1 | mm | 600 - 750 - 1200 - 1500 |
| Panel Height | UFGS 2.1 | mm | 2400 - 2700 - 3000 |
| Panel Thickness | UFGS 2.1 | mm | Insert Value |
| Fire Rating | UFGS 2.1 | n/a | Class A |
| Noise Reduction Coefficient Range | UFGS 2.1 | NRC | 0.50-0.60 - 0.80-0.90 |
| Core Type | UFGS 2.1 | n/a | Standard acoustical - High impact acoustical - Acoustical/tackable |
| Mounting Method | UFGS 2.1 | n/a | concealed spline - mechanical fasteners - magnetic fasteners - hook and loop - adhesive mounting |
| UFGS Section and Date | UFGS MAY 2012 | 09 90 00 | PAINTS AND COATINGS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 11 | Paints and Varnishes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4.4/1.9 | n/a | regional - low voc - low toxicity - biobased |
| Gloss Level | UFGS 3.15.1/3.15.2 | n/a | G1 - G2 - G3 - G4 - G5 - G6 - G7 |
| Primer Type | UFGS 3.15.1/3.15.2 | MPI | Insert Value |
| Intermediate Coat | UFGS 3.15.1/3.15.2 | MPI | Insert Value |
| Topcoat Type | UFGS 3.15.1/3.15.2 | MPI | Insert Value |
| System Dry Film Thickness | UFGS 3.15.1/3.15.2 | mm | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 09 96 00 | HIGH-PERFORMANCE COATINGS 07/07 |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Base Coating Type | UFGS 2.1-2.4 | n/a | heat-resistant - epoxy - polyurethane - chlorinated rubber |
| Topcoat Type | UFGS 2.1-2.4 | n/a | heat-resistant - epoxy - polyurethane - chlorinated rubber |
| System Dry Film Thickness | UFGS 2.1-2.4 | mm | Insert Value |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 09 96 59 | HIGH-BUILD GLAZE COATINGS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Primer Type | UFGS 2.1 | n/a | Insert Value |
| Topcoat Type | UFGS 2.1 | n/a | Epoxy-polyamide - Epoxy-polyester - Aliphatic or aromatic polyurethane - Two component, epoxy-polyamide - moisture-curing urethane |
| System Dry Film Thickness | UFGS 2.1 | mm | Insert Value |
| Gloss Level | UFGS 2.1 | n/a | G1 - G2 - G3 - G4 - G5 - G6 - G7 |

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|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 09 97 01.00 10 | METALLIZING: HYDRAULIC STRUCTURES 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 17 11 | Galvanized Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Metallizing Wire Type | UFGS 2.1 | n/a | Insert Value |

| | | | |
|--------------------------|---------------|-------------|--------------------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 09 97 02 | PAINTING: HYDRAULIC STRUCTURES 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 13 | Paints for Particular Applications |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Paint Formula | UFGS 2.1 | n/a | V-102e - V-106d - V-766e - V-103C - VZ-108d - C-200a |

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|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 09 97 13.00 40 | STEEL COATINGS 07/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 17 | Inorganic Metal Treatments |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Sealant Compound | UFGS 2.2 | n/a | polysulfide-rubber |
| Coating System | UFGS 2.3.1 | n/a | inorganic zinc - inhibitive polyamide epoxy - aliphatic polyurethane |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 09 97 13.15 | EPOXY/FLUOROPOLYURETHANE INTERIOR COATING OF WELDED STEEL PETROLEUM FUEL TANKS 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Primer Type | UFGS 2.2.2.1 | n/a | Epoxy polyamide |
| Intermediate Coat Type | UFGS 2.2.2.2 | n/a | Epoxy polyamide |
| Topcoat Type | UFGS 2.2.3 | n/a | Fluoropolyurethane |
| System Dry Film Thickness | UFGS 2.2 | mm | Insert Value |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 09 97 13.16 | INTERIOR COATING OF WELDED STEEL WATER TANKS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|---------------------------|--------------|------|---|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Coating System | UFGS 2.2 | n/a | NSF Certified Polyamide Epoxy - MIL-DTL-24441 Epoxy System |
| Primer Type | UFGS 2.2.1.1 | n/a | Epoxy polyamide Type III - Epoxy polyamide Type IV |
| Intermediate Coat Type | UFGS 2.2.1.2 | n/a | Epoxy polyamide Type III - Epoxy polyamide Type IV |
| Topcoat Type | UFGS 2.2.2 | n/a | Fluoropolyurethane - Epoxy polyamide Type III - Epoxy polyamide Type IV |
| System Dry Film Thickness | UFGS 2.2 | mm | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 09 97 13.17 | THREE COAT EPOXY INTERIOR COATING OF WELDED STEEL PETROLEUM FUEL TANKS 02/10 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Primer Type | UFGS 2.2.1.1 | n/a | Epoxy polyamide Type IV |
| Intermediate Coat Type | UFGS 2.2.1.2 | n/a | Epoxy polyamide Type IV |
| Topcoat Type | UFGS 2.2.2 | n/a | Epoxy polyamide Type IV |
| System Dry Film Thickness | UFGS 2.2 | mm | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 09 97 13.25 | MAINTENANCE, REPAIR, AND COATING OF TALL ANTENNA TOWERS 05/11 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |

| UFGS Section and Date | UFGS MAY 2012 | 09 97 13.26 | COATING OF STEEL WATERFRONT STRUCTURES 04/06 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 25 | Marine Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|----------------|-------------|------|--|
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Coating System | UFGS 2.1.1 | n/a | Epoxy-Polyamide - Coal Tar Epoxy-Polyamide |

| UFGS Section and Date | UFGS MAY 2012 | 09 97 13.27 | EXTERIOR COATING OF STEEL STRUCTURES 02/10 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Primer Type | UFGS 2.2.1 | n/a | Epoxy polyamide Type III |
| Intermediate Coat Type | UFGS 2.2.2 | n/a | Epoxy polyamide Type IV |
| Topcoat Type | UFGS 2.2.3 | n/a | Polyurethane Type II |
| System Dry Film Thickness | UFGS 2.2 | mm | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 09 97 13.28 | PROTECTION OF BURIED STEEL PIPING AND STEEL BULKHEAD TIE RODS 02/10 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Coating System | UFGS 2.1 | n/a | Tape - Adhesive Thermoplastic Resin - Thermosetting Epoxy - Polyethylene-Butyl Adhesive - Mastic |
| Rock Shield | UFGS 2.1 | n/a | yes - no |

| UFGS Section and Date | UFGS MAY 2012 | 09 97 23.13 | INTERIOR LINING FOR CONCRETE STORAGE TANKS (FOR PETROLEUM FUELS) 05/11 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Coating Formulation | UFGS 2.4 | n/a | TLL-46 - MIL-PRF-4556 - MIL-PRF-23236 |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 09 97 23.16 | LINSEED OIL PROTECTION OF CONCRETE SURFACES 11/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Protection Method | UFGS 2.1 | n/a | Linseed Oil-Mineral Spirits Compound - Linseed Oil Emulsion |
| UFGS Section and Date | UFGS MAY 2012 | 09 97 23 | METALLIC TYPE CONDUCTIVE/SPARK RESISTANT CONCRETE FLOOR FINISH 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Admixtures | UFGS 2.1.3 | n/a | Type A - Type D - Type F |
| Grounding Method | UFGS 2.2 | n/a | Rods - Studs - Disks |
| Surfacing Material | UFGS 2.3 | n/a | Graded Iron |
| UFGS Section and Date | UFGS MAY 2012 | 09 97 30 | PREPARATION OF HISTORIC WOOD AND METAL SURFACES FOR PAINTING 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 21 21 | High Performance Coatings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Consolidant Type | UFGS 2.1 | n/a | Liquid Epoxy - Epoxy Paste |
| UFGS Section and Date | UFGS MAY 2012 | 10 10 00 | VISUAL COMMUNICATIONS SPECIALTIES 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 11 00 | Information Display Specialties |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|-------------|--|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Board Type | UFGS 2.2-2.9 | n/a | presentation board - markerboard - tackboard - case - display track - horizontal sliding unit - copyboard - screen |
| Tackboard Covering | UFGS 2.4 | n/a | cork - vinyl - fabric |
| Board Mounting | UFGS 2.2-2.9 | n/a | wall - ceiling - freestanding - recessed |
| Board Size | UFGS 3.1 | mm x mm | Insert Value |
| Wall Location | UFGS 3.1 | n/a | Insert Value |
| Mounting Height | UFGS 3.1 | mm | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 10 14 01 | EXTERIOR SIGNAGE 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 11 11 | Information Signs |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Sign Type | UFGS 2.1 | n/a | Free-Standing Base Mount - Panel And Post - Changeable Letter Directory - Plaque - wall mount |
| Sign Material | UFGS 2.1/2.4/2.5 | n/a | Aluminum - Galvanized Steel - Insert Value |
| Sign Mounting | UFGS 2.1/2.4/2.5 | n/a | Insert Value |
| Sign Finish | UFGS 2.1/2.4/2.5 | n/a | semi-gloss baked enamel - two-component acrylic polyurethane - anodic - organic |
| Illuminated | UFGS 2.2 | n/a | yes - no |
| UFGS Section and Date | UFGS MAY 2012 | 10 14 02 | INTERIOR SIGNAGE 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 11 11 | Information Signs |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Sign Type | UFGS 2.2-2.6 | n/a | room identification - building directory - plaque - directional wayfinding |
| Sign Material | UFGS 2.2-2.6 | n/a | Aluminum - wood - acrylic - Insert Value |
| Sign Mounting | UFGS 2.2-2.6 | n/a | foam tape - magnetic - fastened - Insert Value - adhesive |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|-------------------|--|
| Sign Finish | UFGS 2.2-2.6 | n/a | semi-gloss baked enamel - two-component acrylic polyurethane - anodic - organic |
| Illuminated | UFGS 2.2-2.6 | n/a | yes - no |
| UFGS Section and Date | UFGS MAY 2012 | 10 21 13 | TOILET COMPARTMENTS 01/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-31 25 11 11 | Toilet Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.2.1 | n/a | regional - low voc - low toxicity - recycled content |
| Component Type | | n/a | Partition - Urinal Screen - Privacy Screen - Dressing Compartment - Shower Stall |
| Component Material | UFGS 2.1 | n/a | stainless steel - painted steel - HDPE - laminated plastic - phenolic - |
| Mounting Method | UFGS 2.3-2.5 | n/a | Floor Mounted - overhead braced - ceiling mounted - floor-to-ceiling - wall hung |
| Hardware Material | UFGS 2.1.5 | n/a | stainless steel - zinc - brass - aluminum - cold rolled steel |
| Hardware Type | UFGS 2.1.5 | n/a | hinge - latch - pull - hook - bracket - shoe |
| UFGS Section and Date | UFGS MAY 2012 | 10 21 23.16 | CUBICLE TRACK AND HARDWARE 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 15 15 13 | Cubicle Track and Hardware |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Mounting Method | UFGS 2.1 | n/a | Ceiling - Hanger |
| UFGS Section and Date | UFGS MAY 2012 | 10 22 13 | WIRE MESH PARTITIONS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 15 17 11 | Wire Mesh Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|----------------|--|
| Sustainability | COBie Guide/UFGS 1.4 | n/a | regional - low voc - low toxicity - recycled content |
| Partition Type | UFGS 2.2/2.3 | n/a | Normal Duty - Heavy Duty |
| Partition Material | UFGS 2.2/2.3 | n/a | steel |
| Frame Type | UFGS 2.2/2.3 | n/a | C-channel - channel - angle |
| Mesh Gage | UFGS 2.2/2.3 | n/a | 6 gage - 10 gage |
| UFGS Section and Date | UFGS MAY 2012 | 10 22 19 | DEMOUNTABLE MOVABLE PARTITIONS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 13 | Demountable Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4.2 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Fire Rating | UFGS 1.2.1 | n/a | Class A |
| Acoustical Rating | UFGS 1.2.2 | STC | 36 - 42 |
| Operation | UFGS 2.1 | n/a | Manual - Electric |
| Panel Type | UFGS 2.2.1 | n/a | gypsum board - wood composite - Fiber composite - steel-sheet-faced gypsum board - steel-sheet-faced mineral fiber board |
| Door Type | UFGS 2.2.4 | n/a | hollow metal - solid core wood veneered - solid core plastic laminate |
| Panel Finish | UFGS 2.3 | n/a | paint - wallcovering - fabric - laminate - wood veneer - tackable wallboard - markerboard |
| UFGS Section and Date | UFGS MAY 2012 | 10 22 26.13 | ACCORDION FOLDING PARTITIONS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 17 15 | Accordion Folding Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3.4 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Operation | UFGS 2.1 | n/a | Manual bi-parting - Electric bi-parting - Manual one-way - Electric one-way |
| Partition Covering | UFGS 2.2.3 | n/a | Fabric, Type I - Fabric, Type II - Fabric, Type III |
| Flame Spread | UFGS 2.3.1 | n/a | 25 |
| Smoke Development | UFGS 2.3.1 | n/a | 50 |
| Acoustical Rating | UFGS 2.3.1 | STC | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 10 22 26.23 | COILING PARTITIONS 08/10 |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 17 17 | Coiling Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Operation | UFGS 2.1 | n/a | Manual bi-parting - Electric bi-parting - Manual one-way - Electric one-way |
| Partition Covering | UFGS 2.2.3 | n/a | Fabric, Type I - Fabric, Type II - Fabric, Type III |
| Flame Spread | UFGS 2.3.1 | n/a | 25 |
| Smoke Development | UFGS 2.3.1 | n/a | 50 |
| Acoustical Rating | UFGS 2.3.1 | STC | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 10 22 39 | FOLDING PANEL PARTITIONS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 17 13 | Folding Panel Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Operation | UFGS 1.2.1/1.2.2 | n/a | Manual - Electric |
| Operation Force | UFGS 1.2.1/1.2.2 | N | 89 - 17 |
| Flame Spread | UFGS 1.2.3.1 | n/a | 25 |
| Smoke Development | UFGS 1.2.3.1 | n/a | 50 |
| Acoustical Rating | UFGS 1.2.3.2 | STC | Insert Value |
| Panel System Type | UFGS 2.2 | n/a | paired - single - center folded - omni-directional - continuously hinged |
| Panel Type | UFGS 2.2.1 | n/a | steel skin - reinforced aluminum - particleboard - tackable base |
| Panel Finish | UFGS 2.2.2 | n/a | Polyolefin - Type II Vinyl |
| UFGS Section and Date | UFGS MAY 2012 | 10 22 43 | SLIDING PARTITIONS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-15 11 17 11 | Horizontally Sliding Partitions |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|---|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Operation | UFGS 1.2.1/1.2.2 | n/a | Manual - Electric |
| Operation Force | UFGS 1.2.1/1.2.2 | N | 89 - 17 |
| Flame Spread | UFGS 1.2.3.1 | n/a | 25 |
| Smoke Development | UFGS 1.2.3.1 | n/a | 50 |
| Acoustical Rating | UFGS 1.2.3.2 | STC | Insert Value |
| Panel System Type | UFGS 2.2 | n/a | paired - single - omni-directional - continuously hinged |
| Panel Type | UFGS 2.2.1 | n/a | steel skin - reinforced aluminum - particleboard - wood - tackable base |
| Panel Finish | UFGS 2.2.2 | n/a | Polyolefin - Type II Vinyl |
| UFGS Section and Date | UFGS MAY 2012 | 10 26 13 | WALL AND CORNER GUARDS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 25 15 13 | Corner Guards |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content |
| Component Material | UFGS 2.1.1 | n/a | extruded acrylic vinyl - PVC - injection molded thermal plastic - stainless steel |
| Fire Rating | UFGS 2.1.1.2 | n/a | Class 1 |
| Component Type | UFGS 2.2-2.6 | n/a | corner guard - wall guard - hand rail - combo hand rail and corner guard - door protector - wall protection |
| Component Finish | UFGS 2.7 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 10 28 13 | TOILET ACCESSORIES 07/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 43 15 29 | Toilet Accessories Dispensers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Finish | UFGS 2.1.2 | n/a | Stainless Steel, #4 Brushed - Carbon Steel, Bright Chrome |
| Component Type | UFGS 2.2 | n/a | Insert Value |
| Capacity | UFGS 2.2 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 10 44 16 | FIRE EXTINGUISHERS 05/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 25 19 | Fire Extinguishers |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|------|---|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Capacity | COBie Guide/UFGS 2.3 | Kg | Insert Value |
| Rating | COBie Guide/UFGS 2.1 | n/a | Class A - Class B - Class C - Class D |
| Extinguisher Type | UFGS 2.1 | n/a | Water and Foam - Carbon Dioxide - Dry Chemical - Wet Chemical - Clean Agent - Dry Powder - Water Mist |
| Component Material | UFGS 2.2 | n/a | corrosion-resistant steel - aluminum - enameled steel |
| Cabinet Material | UFGS 2.3 | n/a | corrosion-resistant steel - aluminum - enameled steel |
| Mounting Method | UFGS 2.5/2.6 | n/a | Wall Bracket - Cabinet, Recessed - Cabinet, Surface - Cabinet, Trimless |

| UFGS Section and Date | UFGS MAY 2012 | 10 51 13 | METAL LOCKERS 05/11 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 13 11 | Metal Lockers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Component Type | UFGS 2.1 | n/a | STL - STC - STW - DTL - DTC - DTW |
| Component Size | UFGS 2.1 | n/a | 1 - 2 - 3 - 4 |
| Component Material | UFGS 2.2 | n/a | Galvanized Steel |
| Component Finish | UFGS 2.2.1 | n/a | Baked enamel |

| UFGS Section and Date | UFGS MAY 2012 | 10 56 13 | STEEL SHELVING 04/06 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 11 11 11 | Commercial Storage Shelves |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Duty Rating | UFGS 2.1 | n/a | medium duty - heavy duty |
| Capacity | UFGS 2.2.1 | Kg | 180 - Insert Value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|----------------|--|
| Finish | UFGS 2.2.1 | n/a | electrostatically applied enamel |
| UFGS Section and Date | UFGS MAY 2012 | 10 71 13.13 | STORM SHUTTERS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 21 11 13 | Exterior Shutters |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Wind Load | UFGS 1.5 | kPa | 1 - 1.4 - 2 - 3.8 - 5.5 |
| Component Material | UFGS 2.1 | n/a | Aluminum - PVC |
| Shutter Type | UFGS 2.2 | n/a | roll - accordion - hinged louvered - removable |
| Operation | UFGS 2.2.1 | n/a | strap - crank - motor |
| Finish | UFGS 2.3 | n/a | anodic - organic |
| UFGS Section and Date | UFGS MAY 2012 | 11 05 40 | COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 00 | Food Service Equipment and Furnishings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Water Inlet | COBie Guide/UFGS 1.2.1 | n/a | Insert Value |
| Drain | COBie Guide/UFGS 1.2.1 | n/a | Insert Value |
| Component Material | UFGS 2.1 | n/a | Stainless Steel |
| Component Finish | UFGS 2.2.1 | n/a | No.3 - No.4 - No.4 XL - No.4 XL Buff |
| UFGS Section and Date | UFGS MAY 2012 | 11 06 40.13 | FOODSERVICE EQUIPMENT SCHEDULE 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 00 | Food Service Equipment and Furnishings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |

| Attribute | Source | Unit | Value |
|------------------------|-------------|------|--------------|
| Water Inlet | COBie Guide | n/a | Insert Value |
| Drain | COBie Guide | n/a | Insert Value |
| Naval Equipment Symbol | UFGS 2.1.2 | n/a | Insert Value |
| Logical Class | UFGS 2.1.2 | n/a | Insert Value |
| Description | UFGS 2.1.2 | n/a | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 11 13 10 | DOCK LEVELERS 08/09 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-23 23 13 | Dock Levelers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Operation | UFGS 2.2 | n/a | Electro-Hydraulic - Mechanical - Air Powered |
| Height Adjustment Range | UFGS 2.2.2 | mm | 0 to 1295 - XX to XX |
| Rated Capacity | UFGS 2.2.6 | Kg | 9070 |
| Restraining Device | UFGS 2.7.1 | n/a | yes - no |
| Bumpers | UFGS 2.7.2 | n/a | yes - no |

| UFGS Section and Date | UFGS MAY 2012 | 11 24 27 | AIR STRIPPER 10/07 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-13 27 11 | Cleaning and Maintenance Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Component Type | UFGS 2.2 | n/a | pump - blower - connector - mist eliminator - exhaust stack - control - feed system |

| UFGS Section and Date | UFGS MAY 2012 | 11 27 13 | RADIOGRAPHIC DARKROOM EQUIPMENT 04/06 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 35 11 | Darkroom Equipment and Furnishings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |

| Attribute | Source | Unit | Value |
|--------------------|----------|------|--|
| Component Category | UFGS 2.2 | n/a | Film-Loading Bin - Cassette Transfer Box Cabinet - Illuminator - Processor - Developing Tank |
| Voltage | UFGS 2.2 | n/a | 120 - 208 - 220 - 240 |
| Component Type | UFGS 2.1 | n/a | Insert Value |

| | | | |
|------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 11 31 13 | ELECTRIC KITCHEN EQUIPMENT 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 00 | Food Service Equipment and Furnishings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity |
| Component Type | UFGS 2.1 | n/a | Insert Value |
| Capacity | UFGS 2.1 | n/a | Insert Value |

| | | | |
|------------------------------|------------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 11 41 11 | REFRIGERATED AND FROZEN FOOD STORAGE EQUIPMENT 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 27 | Commercial Refrigerators And Freezers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Panel Type | UFGS 2.4.1 | n/a | Stainless Steel - Aluminum - Fiberglass |
| Panel Insulation | UFGS 2.4.1 | n/a | Foamed in Place polyurethane |
| Floor Type | UFGS 2.4.2/2.4.3 | n/a | Prefabricated Floor - Floorless |
| Door Count | UFGS 2.4.4 | n/a | 1 - 2 - Insert Value |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 11 42 00 | FOOD PREPARATION EQUIPMENT 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 31 | Commercial Food Preparation Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Water Inlet | COBie Guide | n/a | splashback - counter top - ledge |

| Attribute | Source | Unit | Value |
|-----------------|------------------------|------|----------------------|
| Drain | COBie Guide/UFGS 2.4.3 | n/a | Insert Value |
| Component Type | UFGS 2.2 | n/a | Insert Value |
| Mounting Method | UFGS 2.4.2 | n/a | Leg - Wall - Counter |

| | | | |
|------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 11 44 00 | FOOD COOKING EQUIPMENT 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 13 | Commercial Food Cooking Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Water Inlet | COBie Guide | n/a | Insert Value |
| Drain | COBie Guide | n/a | Insert Value |
| Component Category | UFGS 2.1-2.8 | n/a | Hood - Oven - Burner - Broiler - Fryer - Griddle - Steam Cooker - Fire Extinguisher |
| Component Type | UFGS 2.1-2.8 | n/a | Insert Value |

| | | | |
|------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 11 46 00 | FOOD DISPENSING EQUIPMENT 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 25 | Commercial Food and Beverage Dispensing Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Water Inlet | COBie Guide | n/a | splashback - counter top - ledge |
| Drain | COBie Guide | n/a | Insert Value |
| Filter Type | UFGS 2.1 | n/a | Cartridge - Integrated - None |
| Working Pressure | UFGS 2.1.2 | kPa | 860 |
| Flow Rate | UFGS 2.1.2 | L/minute | 11.34 - 5.67 - 3.78 |
| Mounting Method | UFGS 2.2.2 | n/a | Leg - Wall - Counter |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 11 47 00 | ICE MACHINES 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 29 | Commercial Ice Machines |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|---------------------------|-------------|------|---------------------|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Power | COBie Guide | kW | Insert Value |
| Connection | COBie Guide | n/a | Insert Value |
| Water Inlet | COBie Guide | n/a | Insert Value |
| Drain | COBie Guide | n/a | Insert Value |
| Automatic Cleaning System | UFGS 2.4 | n/a | internal - external |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 11 48 00 | CLEANING AND DISPOSAL EQUIPMENT 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 21 | Commercial Food Disposal Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Component Material | UFGS 2.4-2.11 | n/a | Stainless Steel |
| Component Category | UFGS 2.4-2.11 | n/a | Countertop - Pass-Through - Dishwasher - Disposal - Conveyor |
| Component Type | UFGS 2.4-2.11 | n/a | Insert Value |

| | | | |
|------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 11 53 00 | LABORATORY EQUIPMENT AND FUMEHOODS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 69 00 | Medical and Laboratory Fume and Debris Hoods |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional - low voc - low toxicity - recycled content |
| Component Material | UFGS 2.1 | n/a | Aluminum - Carbon Steel - Stainless Steel |
| Glass Type | UFGS 2.1 | n/a | FT, Clear |
| Unit Type | UFGS 2.2 | n/a | Insert Value |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 11 68 13 | PLAYGROUND EQUIPMENT 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 29 17 | Playground Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|------------------------|-------------------|------|--|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Age Group | UFGS 1.3.3 | n/a | Pre-Toddler - toddler - Pre-School - School-Age - Pre-Teen |
| Protection | UFGS 2.2.4 | n/a | Protective Barrier - Guardrail |
| Component Type | UFGS 2.2.5-2.2.12 | n/a | Sand Table - Rotating Swing - Single-Axis Swing - Spring Rocking Equipment - Roof - Sliding Pole - Slide - Enclosure |
| Component Construction | UFGS 2.2.5-2.2.12 | n/a | Wood - Rubber - Steel - Aluminum - HDPE - Galvanized Steel - PVC - Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 11 70 00 | GENERAL REQUIREMENTS FOR MEDICAL AND DENTAL EQUIPMENT 05/11 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 00 00 | Medical and Laboratory Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Equipment Type | UFGS 2.2 | n/a | Safety - Anesthetizing - Motor - Backflow Prevention |

| UFGS Section and Date | UFGS MAY 2012 | 11 71 00 | WARMING CABINETS, STERILIZERS, AND ASSOCIATED EQUIPMENT 02/09 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 57 00 | Medical Sterilization Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Component Material | UFGS 2.1 | n/a | Carbon Steel - Stainless Steel |
| Component Category | UFGS 2.5-2.14 | n/a | Sterilizer - Aerator - Washer/Sanitizer - Distiller - Warmer |
| Component Type | UFGS 2.5-2.14 | n/a | Insert Value |
| Component Finish | UFGS 2.15 | n/a | manufacturer's standard finish - no. 3 - no. 4 |

| UFGS Section and Date | UFGS MAY 2012 | 11 72 13 | MEDICAL EQUIPMENT, MISCELLANEOUS 04/06 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 00 00 | Medical and Laboratory Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|-----------------------|-------------|------|---|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Component Material | UFGS 2.1 | n/a | Stainless Steel - Carbon Steel - Aluminum - Laminated Plastic |
| Component Category | UFGS 2.2 | n/a | Specimen Cabinet - Autopsy Table - Narcotic Cabinet - Clock - Dispenser - Medicine Center |
| Component Type | UFGS 2.2 | n/a | Pass-Thru - Tank Type - L-Shaped - Moveable System - Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 11 74 00 | DENTAL EQUIPMENT 04/06 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 17 13 | Dental Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Component Material | UFGS 2.1 | n/a | Stainless Steel - Carbon Steel - Aluminum |
| Component Type | UFGS 2.2 | n/a | Dust Collector - Air Compressor - Light - Utility Service Center |
| Voltage | UFGS 2.2 | VAC | 120 - 208 - 220 - 240 |
| Capacity | UFGS 2.2 | n/a | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 11 82 20 | INCINERATORS, GENERAL PURPOSE 08/08 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 61 00 | Incinerators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Waste Reduction | UFGS 1.3.1 | n/a | Reduction to 10% - Reduction to 45% |
| Emissions | UFGS 1.5.1.1 | ppm | Insert Value |
| Noise Level | UFGS 1.5.2 | dBa | 85 |
| Unit Type | UFGS 2.3.1 | n/a | 0 - 1 - 2 - 3 - 5 |
| Heat Released | UFGS 2.3.3 | W/m2 | Insert Value |
| Gas Velocity | UFGS 2.3.3 | m/second | Insert Value |
| Operating Temperature | UFGS 2.3.3 | degrees C | 704 to 871 |

| UFGS Section and Date | UFGS MAY 2012 | 11 82 21 | MEDICAL WASTE INCINERATORS 08/08 |
|--------------------------|---------------|----------------|----------------------------------|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 69 13 17 | Laboratory Incinerators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-----------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Noise Level | UFGS 2.1.5 | dBa | Insert Value |
| Waste Reduction | UFGS 2.4 | n/a | Reduction to 10% - Reduction to 45% |
| Emissions | UFGS 2.4 | ppm | Insert Value |
| Unit Type | UFGS 2.4 | n/a | 0 - 1 - 2 - 3 - 4 - 5 |
| Capacity | UFGS 2.4 | kg/hour | Insert Value |
| Heat Released | UFGS 2.4 | W/m2 | Insert Value |
| Gas Velocity | UFGS 2.4 | m/second | Insert Value |
| Operating Temperature | UFGS 2.4 | degrees C | 704 to 871 |

| | | | |
|------------------------------|----------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 12 21 00 | WINDOW BLINDS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 21 13 11 | Window Blinds |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4 | n/a | regional - low voc - low toxicity - recycled content |
| Component Type | UFGS 2.1 | n/a | Horizontal - Vertical |
| Slat Size | UFGS 2.1 | mm | 25 - 50 - 90 |
| Mounting Method | UFGS 2.1 | n/a | Inside - Outside - Ceiling - Wall |
| Color | UFGS 2.2 | n/a | Insert Value |

| | | | |
|------------------------------|----------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 12 22 00 | CURTAINS AND DRAPES 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 21 13 13 | Curtains and Drapes |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.5 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Fabric Weight | UFGS 2.1.1 | kg/m2 | Insert Value |
| Pattern | UFGS 2.1.1 | n/a | Printed - Woven |
| Weave | UFGS 2.1.1 | n/a | Open - Semi Open |
| Texture | UFGS 2.1.1 | n/a | Burlap - Smooth - Twill |

| Attribute | Source | Unit | Value |
|---------------------|------------|------|---|
| Color | UFGS 2.1.1 | n/a | Insert Value |
| Shading Coefficient | UFGS 2.1.1 | n/a | Insert Value |
| Lining | UFGS 2.1.1 | n/a | Insulated - soft blackout |
| Flame Resistance | UFGS 2.1.1 | n/a | small scale - large scale - small and large scale |
| Heading | UFGS 2.1.3 | n/a | Hooks - Snap-Tape |
| Operation | UFGS 2.1.4 | n/a | Stationary - Traverse, Manual - Traverse, Motorized |
| Actuation | UFGS 2.1.4 | n/a | One-Way Draw - Two-Way Draw |

| | | | |
|------------------------------|------------------------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 12 24 13 | ROLLER WINDOW SHADES 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-17 21 13 17 13 | Roller Shades |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.4.5/1.4.6 | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Shade Type | UFGS 2.1 | n/a | Light Filtering - Room Darkening |
| Flame Resistance | UFGS 2.1 | n/a | small scale |
| Operation | UFGS 2.1 | n/a | Manual - Motorized |
| Color | UFGS 2.2 | n/a | Insert Value |

| | | | |
|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 12 31 00 | MANUFACTURED METAL CASEWORK 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 19 11 11 | Metal Modular General Casework |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Material | UFGS 2.2 | n/a | Type 302 Steel - Type 304 Steel - Type 316 Steel |
| Material Thickness | UFGS 2.3 | mm | 0.85 |
| Component Type | UFGS 2.3 | n/a | Wall Cabinet - Base Cabinet - Tall Cabinet - Shelf - Filler |
| Cabinet Type | UFGS 2.3.4 | n/a | 1 Door - 2 Door - Door and Drawer - Insert Value |
| Cabinet Finish | UFGS 2.7 | n/a | Insert Value |

| | | | |
|--------------------------|---------------|----------------|----------------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 12 32 00 | MANUFACTURED WOOD CASEWORK 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 19 11 13 | Wood Modular General Casework |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|--------------|------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf |
| Material | UFGS 2.3-2.7 | n/a | Wood - Particle Board - Plywood - Melamine - Laminate |
| Material Thickness | UFGS 2.3-2.7 | mm | Insert Value |
| Component Type | UFGS 2.3-2.7 | n/a | Wall Cabinet - Base Cabinet - Tall Cabinet - Shelf - Filler |
| Cabinet Type | UFGS 2.3-2.7 | n/a | 1 Door - 2 Door - Door and Drawer - Insert Value |
| Cabinet Finish | UFGS 2.11 | n/a | Factory finish - Field Finish |

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|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 12 34 00 | MANUFACTURED PLASTIC CASEWORK 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 19 11 15 | Plastic Modular General Casework |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity |
| Material | UFGS 2.2 | n/a | Plastic Laminate, Type XX, Grade XX, class XX, Finish XX |
| Material Thickness | UFGS 2.2 | mm | Insert Value |
| Component Type | UFGS 2.3-2.5 | n/a | Wall Cabinet - Base Cabinet - Tall Cabinet - Shelf - Filler |
| Cabinet Type | UFGS 2.3-2.5 | n/a | 1 Door - 2 Door - Door and Drawer - Insert Value |

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|------------------------------|----------------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 12 35 20 | FOODSERVICE CASEWORK, COUNTERTOPS, AND ACCESSORIES 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 19 15 29 | Commercial Kitchen Specialty Casework |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | regional - low voc - low toxicity - recycled content |
| Component Category | UFGS 2.1-2.5 | n/a | Counter - Tray Slide - Protection Glass - Food Shield - Drip Gutter |
| Component Type | UFGS 2.1-2.5 | n/a | Insert Value |
| Material | UFGS 2.1-2.5 | n/a | Stainless Steel - Glass - Acrylic - Insert Value |
| Material Thickness | UFGS 2.1-2.5 | mm | Insert Value |

| | | | |
|-----------------------|---------------|----------|-----------------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 12 35 70 | MEDICAL AND DENTAL CASEWORK 08/10 |
|-----------------------|---------------|----------|-----------------------------------|

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 19 15 15 | Medical Specialty Casework |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.3 | n/a | regional - low voc - low toxicity - recycled content |
| Component Category | UFGS 2.1 | n/a | Medical - Dental - Prosthetics - Countertop |
| Component Type | UFGS 2.1 | n/a | Insert Value |
| Material | UFGS 2.1 | n/a | baked enamel carbon steel - corrosion resisting steel - wood core covered with laminated plastic - carbon steel covered with laminated plastic |
| Material Thickness | UFGS 2.1 | mm | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 12 36 00.00 20 | MANUFACTURED VANITIES 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 35 | Commercial Serving Counters |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf |
| Vanity Type | UFGS 2.1 | n/a | Single - Double |
| Material | UFGS 2.1 | n/a | plywood |
| Material Thickness | UFGS 2.3 | mm | 20 |
| Vanity Width | UFGS 2.1 | mm | 750 - 900 - 1050 - 1200 - 1500 |
| Finish | UFGS 2.2 | n/a | Insert Value |
| Drawer Count | UFGS 2.4 | n/a | 0 - 1 - 2 - 3 - 4 - 5 - 6 |
| UFGS Section and Date | UFGS MAY 2012 | 12 36 00 | COUNTERTOPS 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 21 35 | Commercial Serving Counters |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf |
| Component Type | UFGS 2.3 | n/a | Countertop - Backsplash |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|---|
| Component Material | UFGS 2.3 | n/a | plywood - wood - particle board - Granite - Marble - Synthetic resin - Stainless steel - Tile - FRP |
| Material Thickness | UFGS 2.3 | mm | Insert Value |
| Surfacing | UFGS 2.4 | n/a | plastic laminate - corrosion-resistant steel - corrosion-resistant steel without backing |
| Finish | UFGS 2.4 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 12 48 13.13 | ENTRANCE FLOOR MATS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 29 15 31 | Floor Mats |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content |
| Mat Type | UFGS 2.2 | n/a | Resilient Link - Rubber - Vinyl - Cocoa - Recycled Rubber Tire - Carpet - Loop Filament - Nylon |
| Mat Usage | UFGS 2.2 | n/a | Entrance - Floor |
| Mat Thickness | UFGS 2.2 | mm | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 12 50 00 | FURNITURE SYSTEMS 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 11 00 | Commercial Furniture |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf |
| GFCI | COBie Guide/UFGS 2.9 | n/a | Insert Value |
| Construction Type | UFGS 2.1 | n/a | Metal - Composite Wood - Fiberboard - Plastic - Refurbished - Fabric - Linoleum |
| Furniture System Type | UFGS 2.2 | n/a | Panel - Spline Wall - Desk Based |
| Component Type | UFGS 2.2-2.6 | n/a | Wall Component - Desk Component - Work Surface - Storage - Accessory |
| Capacity | UFGS 2.5 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 12 55 00 | DETENTION FURNITURE AND ACCESSORIES 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 35 23 15 | Detention Furniture |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|-------------------|--|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.2.5 | n/a | insert reqts |
| Material | UFGS 2.1 | n/a | Steel Plate |
| Component Category | UFGS 2.2-2.10 | n/a | Mirror - Pass window - Grab Bar - Pistol Locker - Hook - Cabinet - Bunk - Table - Seating |
| Component Type | UFGS 2.2-2.10 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 12 65 00 | FIXED SEATING 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-21 25 11 11 11 | Fixed Audience Seating |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | regional - low voc - low toxicity - recycled content - certified wood - nauf |
| Upholstery Material | UFGS 2.1 | n/a | polypropylene - polyester - nylon |
| Upholstery Weave | UFGS 2.1 | n/a | Plain - Decorative |
| Standard Material | UFGS 2.2 | n/a | Steel - Cast Iron |
| Inner Panel Material | UFGS 2.2 | n/a | steel - wood - polypropylene - upholstered |
| Back Material | UFGS 2.2 | n/a | steel - wood - polypropylene - upholstered |
| Armrest Type | UFGS 2.2 | n/a | Common - Tablet - Cupholder |
| UFGS Section and Date | UFGS MAY 2012 | 12 93 00 | SITE FURNISHINGS 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-11 29 00 | Site Furnishings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Material | UFGS 2.1 | n/a | Insert Value |
| Construction | UFGS 2.5 | n/a | Wood - Metal - Concrete |
| Component Type | UFGS 2.5 | n/a | Bench - Chair - Bicycle Rack - Bollard - Planter - Water Receptacle - Shelter - Table - Tree Grate |
| UFGS Section and Date | UFGS MAY 2012 | 13 17 43 | HYDROTHERAPY EQUIPMENT 02/11 |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 29 11 11 11 | Hydrotherapy Bath |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Material | UFGS 2.1 | n/a | Stainless Steel - Aluminum |
| Component Category | UFGS 2.3 | n/a | Bath - Whirlpool Bath |
| Component Type | UFGS 2.3 | n/a | Arm Treatment - Leg Treatment - Sitting - Burn Treatment - Hydrotherapy |
| Temperature Range | UFGS 2.3.6 | degrees C | 21 and 43 |
| Flow Rate | UFGS 2.1 | l/minute | 38 |
| UFGS Section and Date | UFGS MAY 2012 | 13 21 26 | COLD-STORAGE ROOMS (PREFABRICATED PANEL TYPE) 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 31 19 13 11 | Cold Storage Rooms |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Room Type | UFGS 2.1 | n/a | Insert Value |
| Room Size | UFGS 2.1 | n/a | Insert Value |
| Room Style | UFGS 2.1 | n/a | Insert Value |
| Door Type | UFGS 2.1 | n/a | Swing - Sliding |
| Refrigeration System | UFGS 2.1 | n/a | Remote - Self Contained |
| UFGS Section and Date | UFGS MAY 2012 | 13 21 48 | PREFABRICATED AUDIOMETRIC ROOMS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 31 15 | Special Purpose Rooms |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Noise Reduction | UFGS 1.3.1 | dB | 24 to 55 |
| Sound Absorption | UFGS 1.3.1 | NRC | 0.95 |

| Attribute | Source | Unit | Value |
|------------------------------|----------------|-------------------|--|
| Interior Noise Level | UFGS 1.3.1 | dB | 21.5 to 41 |
| Construction | UFGS 2.2 | n/a | Single Wall - Double Wall |
| Component Type | UFGS 2.5 | n/a | M-2050 Room - M-0300 Booth |
| UFGS Section and Date | UFGS MAY 2012 | 13 27 54.00 10 | ELECTROMAGNETIC (EM) SHIELDING 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 31 19 19 11 | Electromagnetic Shielded Rooms |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Construction | UFGS 2.1 | n/a | Bolted - Welded |
| Component Type | UFGS 2.1 - 2.6 | n/a | Shielding Enclosure - Door - Filter - Surge Arrestor |
| Electromagnetic Attenuation | UFGS 2.2 | dB at kHz | Insert Value |
| Electric Field Attenuation | UFGS 2.2 | dB at kHz | Insert Value |
| Plane Wave Attenuation | UFGS 2.2 | dB at kHz | Insert Value |
| Filter Rating | UFGS 2.6 | n/a | XX Volts at XX Hz |
| UFGS Section and Date | UFGS MAY 2012 | 13 34 19 | METAL BUILDING SYSTEMS 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 29 11 | Pre Engineered Structures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Design Load | UFGS 1.2 | N/m2 | Insert Value |
| Live Load | UFGS 1.2 | N/m2 | Insert Value |
| Snow Load | UFGS 1.2 | N/m2 | Insert Value |
| Wind Load | UFGS 1.2 | N/m2 | Insert Value |
| Thermal Resistance | UFGS 1.2 | R | Insert Value |
| U Value | UFGS 1.2 | n/a | Insert Value |
| Air Infiltration | UFGS 1.2 | L/s per sq. m | Insert Value |
| Water Penetration | UFGS 1.2 | n/a | none at 137 Pa |
| Wind Uplift Resistance Class | UFGS 1.2 | n/a | 30 - 60 - 90 |
| Frame Type | UFGS 1.4 | n/a | Rigid Clear Span - Rigid Modular - Truss-Frame Clear Span - Truss-Frame Modular - Long Bay - Lean-To |
| Roof Type | UFGS 1.4 | n/a | vertical-rib, standing-seam - trapezoidal-rib standing-seam - metal roof panels |
| Panel Type | UFGS 2.4 | n/a | Roof - Wall - Liner |

| Attribute | Source | Unit | Value |
|-----------------------|-----------|------|--------------------------------|
| Panel Material | UFGS 2.4 | n/a | Aluminum - Steel |
| Panel Thickness | UFGS 2.4 | mm | Insert Value |
| Panel Insulation Type | UFGS 2.4 | n/a | Foamed-in-Place - Board - None |
| Finish | UFGS 2.10 | n/a | Insert Value |

| UFGS Section and Date | UFGS MAY 2012 | 13 48 00.00 10 | SEISMIC PROTECTION FOR MECHANICAL EQUIPMENT 10/07 |
|-------------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 29 19 11 | Sound, Vibration and Seismic Control Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Horizontal Lateral Force Resistance | UFGS 1.3.1 | n/a | insert reqts |
| Component Type | UFGS 2.1-2.5 | n/a | Flexible Ball Joint - Flexible Mechanical Joint - Manufactured Ball Joint - Sway Brace |

| UFGS Section and Date | UFGS MAY 2012 | 13 48 00 | SEISMIC PROTECTION FOR MISCELLANEOUS EQUIPMENT 08/08 |
|-------------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 29 19 11 | Sound, Vibration and Seismic Control Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |
| Horizontal Lateral Force Resistance | UFGS 1.3.1 | n/a | insert reqts |

| UFGS Section and Date | UFGS MAY 2012 | 13 49 19 | X-RAY SHIELDING 02/09 |
|------------------------------|---------------|-------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 63 11 13 11 | X Ray Protective Screens |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | insert reqts |

| Attribute | Source | Unit | Value |
|------------------------------------|------------------|-------------------|--|
| Component Type | UFGS 2.3-2.14 | n/a | Lead Sheet - Lead Lined CMU - Lead Lined Wood Panel - Lead Lined Lath - Lead Lined Gypsum Wallboard - Lead Lined Door - Window - Screen |
| Lead Thickness | UFGS 2.3-2.14 | n/a | Insert Value |
| Total Lead Equivalent Protection | UFGS 2.3-2.14 | n/a | Insert Value |
| UFGS Section and Date | UFGS MAY 2012 | 14 21 00.00 20 | ELECTRIC TRACTION ELEVATORS 05/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-23 11 11 11 | Traction Elevators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content - certified wood - nauf |
| Elevator Service | UFGS 2.1.1/2.1.2 | n/a | passenger - freight class a - freight class b - freight class c |
| Elevator Type | UFGS 2.1.1/2.1.2 | n/a | geared - gearless |
| Rated Load | UFGS 2.1.1/2.1.2 | kg (lb) | 953 kg (2100 lb) - 1135 kg (2500 lb) - 1589 kg (3500 lb) - 1816 kg (4000 lb) - 2270 kg (5000 lb) |
| Rated Speed | UFGS 2.1.1/2.1.2 | mps (fpm) | 0.38 mps (75 fpm) - 0.51 mps (100 fpm) - 0.64 mps (125 fpm) - 0.76 mps 150 fpm) - 1.0 mps (200 fpm) |
| Travel Length | UFGS 2.1.1/2.1.2 | m (ft) | insert value |
| Number of Stops | UFGS 2.1.1/2.1.2 | n/a | insert value |
| Number of Hoist Way Openings Front | UFGS 2.1.1/2.1.2 | n/a | insert value |
| Number of Hoist Way Openings Rear | UFGS 2.1.1/2.1.2 | n/a | insert value |
| Car Door Type | UFGS 2.1.1/2.1.2 | n/a | single-speed side slide door - single-speed center opening door - two-speed side slide door - two-speed center opening door - vertical rising gate |
| Cab Enclosure Floor Finish | UFGS 2.1.1/2.1.2 | n/a | carpet - vinyl composition tile - vinyl sheet tile - diamond plate |
| Cab Enclosure Wall Finish | UFGS 2.1.1/2.1.2 | n/a | prefinished steel panels - laminated plastic on particleboard - stainless steel |
| Cab Enclosure Door Finish | UFGS 2.1.1/2.1.2 | n/a | prefinished steel - stainless steel |
| Cab Enclosure Ceiling | UFGS 2.1.1/2.1.2 | n/a | supported - prefinished steel panels - anodized aluminum - eggcrate |
| Elevator Operation | UFGS 2.2.7 | n/a | single two-stop automatic - selective collective automatic - duplex selective collective automatic - group automatic |
| UFGS Section and Date | UFGS MAY 2012 | 14 21 13 | ELECTRIC TRACTION FREIGHT ELEVATORS 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-23 11 11 11 11 | Freight Traction Elevators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------------|---------------|-------------------|--|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Elevator Service | UFGS 2.1.1 | n/a | freight class a - freight class b - freight class c |
| Elevator Type | UFGS 2.1.1 | n/a | geared - gearless |
| Rated Load | UFGS 2.1.1 | kg (lb) | insert value |
| Rated Speed | UFGS 2.1.1 | mps (fpm) | insert value |
| Travel Length | UFGS 2.1.1 | m (ft) | insert value |
| Number of Stops | UFGS 2.1.1 | n/a | insert value |
| Number of Hoist Way Openings Front | UFGS 2.1.1 | n/a | insert value |
| Number of Hoist Way Openings Rear | UFGS 2.1.1 | n/a | insert value |
| Car Door Type | UFGS 2.1.1 | n/a | single-speed side slide door - single-speed center opening door - two-speed side slide door - two-speed center opening door - vertical rising gate |
| Cab Enclosure Floor Finish | UFGS 2.1.1 | n/a | carpet - vinyl composition tile - vinyl sheet tile - diamond plate |
| Cab Enclosure Wall Finish | UFGS 2.1.1 | n/a | prefinished steel panels - laminated plastic on particleboard - stainless steel |
| Cab Enclosure Door Finish | UFGS 2.1.1 | n/a | prefinished steel - stainless steel |
| Cab Enclosure Ceiling | UFGS 2.1.1 | n/a | supported - prefinished steel panels - anodized aluminum |
| Elevator Operation | UFGS 2.9.2 | n/a | semi-selective - full-selective |
| UFGS Section and Date | UFGS MAY 2012 | 14 21 23 | ELECTRIC TRACTION PASSENGER ELEVATORS 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-23 11 11 11 13 | Passenger Traction Elevators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content - certified wood - nauf |
| Elevator Service | UFGS 2.1.1 | n/a | passenger |
| Elevator Type | UFGS 2.1.1 | n/a | geared - gearless |
| Rated Load | UFGS 2.1.1 | kg (lb) | insert value |
| Rated Speed | UFGS 2.1.1 | mps (fpm) | insert value |
| Travel Length | UFGS 2.1.1 | m (ft) | insert value |
| Number of Stops | UFGS 2.1.1 | n/a | insert value |
| Number of Hoist Way Openings Front | UFGS 2.1.1 | n/a | insert value |
| Number of Hoist Way Openings Rear | UFGS 2.1.1 | n/a | insert value |
| Car Door Type | UFGS 2.1.1 | n/a | single-speed side slide door - single-speed center opening door - two-speed side slide door - two-speed center opening door |

| Attribute | Source | Unit | Value |
|----------------------------|------------|------|--|
| Cab Enclosure Floor Finish | UFGS 2.1.1 | n/a | carpet - vinyl composition tile - vinyl sheet tile - diamond plate |
| Cab Enclosure Wall Finish | UFGS 2.1.1 | n/a | prefinished steel panels - laminated plastic on particleboard - stainless steel |
| Cab Enclosure Door Finish | UFGS 2.1.1 | n/a | prefinished steel - stainless steel |
| Cab Enclosure Ceiling | UFGS 2.1.1 | n/a | supported - prefinished steel panels - anodized aluminum - eggcrate |
| Elevator Operation | UFGS 2.2.7 | n/a | single two-stop automatic - selective collective automatic - duplex selective collective automatic - group automatic |

| UFGS Section and Date | UFGS MAY 2012 | 14 24 00 | HYDRAULIC ELEVATORS 08/10 |
|------------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-23 11 11 13 | Hydraulic Elevators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content - certified wood - nauf - biobased |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| SCR HP Rating | COBie Guide | HP | insert value |
| MG Motor Power | COBie Guide | KW | insert value |
| Starting Amps | COBie Guide | Amps | insert value |
| Accelerating Amps | COBie Guide | Amps | insert value |
| Machine Room Heat Load | COBie Guide | K Cal/hr | insert value |
| Elevator Service | UFGS 2.1/2.2 | n/a | passenger - freight class a - freight class b - freight class c |
| Elevator Operation | UFGS 2.3.7 | n/a | single two-stop automatic - selective collective automatic - duplex selective collective automatic - group automatic |
| Rated Load | UFGS 2.1.1/2.2.1 | kg (lb) | 953 kg (2100 lb) - 1135 kg (2500 lb) - 1589 kg (3500 lb) - 1816 kg (4000 lb) - 2270 kg (5000 lb) |
| Rated Speed | UFGS 2.1.1/2.2.1 | mps (fpm) | 0.38 mps (75 fpm) - 0.51 mps (100 fpm) - 0.64 mps (125 fpm) - 0.76 mps 150 fpm) - 1.0 mps (200 fpm) |
| Travel Length | UFGS 2.1.1/2.2.1 | m (ft) | insert value |
| Number of Stops | UFGS 2.1.1/2.2.1 | n/a | insert value |
| Number of Hoist Way Openings Front | UFGS 2.1.1/2.2.1 | n/a | insert value |
| Number of Hoist Way Openings Rear | UFGS 2.1.1/2.2.1 | n/a | insert value |
| Car Door Type | UFGS 2.1.1/2.2.2 | n/a | single-speed side slide - single-speed center opening - two-speed side slide - two-speed center opening - vertical bi-parting |
| Cab Enclosure Floor Finish | UFGS 2.1.1/2.2.2 | n/a | carpet - vinyl composition tile - vinyl sheet tile - diamond plate |
| Cab Enclosure Wall Finish | UFGS 2.1.1/2.2.2 | n/a | prefinished steel panels - laminated plastic on particleboard - stainless steel |
| Cab Enclosure Ceiling | UFGS 2.1.1/2.2.2 | n/a | supported - prefinished steel panels - anodized aluminum - eggcrate |

| Attribute | Source | Unit | Value |
|---------------------------|------------------|------|--|
| Cab Enclosure Door Finish | UFGS 2.1.2/2.2.2 | n/a | prefinished steel - stainless steel |
| Elevator Operation | UFGS 2.3.7 | n/a | single two-stop automatic - selective collective automatic - duplex selective collective automatic - group automatic |

| UFGS Section and Date | UFGS MAY 2012 | 14 92 00 | PNEUMATIC-TUBE SYSTEM 02/09 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-23 17 15 25 | Pneumatic Conveyors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional - low voc - low toxicity - recycled content |
| Tubing Diameter | UFGS 2.2 | mm (in) | 152.4 (6) - 101.6 (4) |

| UFGS Section and Date | UFGS MAY 2012 | 21 12 00 | STANDPIPE SYSTEMS 05/11 |
|--------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | manual dry class I standpipe system – combination standpipe system – automatic standpipe system – wet class 1 standpipe system |
| Residual Pressure at Discharge | UFGS 1.4.1 | kPa (psig) | 448.2 kPa (65 psig) – 689.5 kPa (100 psig) |
| Aboveground Piping Materials | UFGS 2.1 | n/a | steel |
| Buried Piping Systems | UFGS 2.2 | n/a | outside-coated cement-lined ductile iron |

| UFGS Section and Date | UFGS MAY 2012 | 21 13 00.00 40 | FIRE-SUPPRESSION SPRINKLER SYSTEMS 08/10 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|------------------------------------|---------------|---------------------|---|
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving – water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | fire-suppression sprinkler system |
| Underground Piping Materials | UFGS 2.2 | n/a | cast-iron water pipe – ductile-iron wire pipe |
| Aboveground Piping Materials | UFGS 2.3 | n/a | black carbon steel – galvanized carbon steel |
| Fire Department Connections | UFGS 2.5 | n/a | wall siamese – sidewalk siamese - wall hydrant - roof manifold - fire hydrants |
| Riser Alarm Equipment | UFGS 2.6 | n/a | wet-pipe check valve – standard check valve – dry-pipe check valve – water-flow device |
| Dry-Pipe Maintenance Air | UFGS 2.7 | n/a | independent source – continuous source |
| Sprinkler Heads | UFGS 2.9 | n/a | upright – pendant - sidewall |
| UFGS Section and Date | UFGS MAY 2012 | 21 13 13.00 10 | WET PIPE SPRINKLER SYSTEM, FIRE PROTECTION 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving – water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | wet pipe sprinkler system |
| Hydraulic Design Discharge Density | UFGS 1.2.1 | L/min/sq.m (gpm/sf) | insert value |
| Underground Piping Components | UFGS 2.4 | n/a | ductile iron piping and fittings |
| Aboveground Piping Components | UFGS 2.5 | n/a | black steel – galvanized steel – copper – plastic |
| Sprinklers | UFGS 2.10 | n/a | concealed – recessed – flush – pendant – upright - sidewall |
| UFGS Section and Date | UFGS MAY 2012 | 21 13 13.00 20 | WET PIPE SPRINKLER SYSTEM, FIRE PROTECTION 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |

| Attribute | Source | Unit | Value |
|---------------------------------|-------------|------------------------|---|
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | automatic wet pipe fire extinguishing sprinkler system |
| Density of Application of Water | UFGS 1.3.3 | L/min/sq.m (gpm/sf) | insert value |
| Underground Piping Components | UFGS 2.1 | n/a | insert value |
| Aboveground Piping Components | UFGS 2.2 | n/a | black steel - galvanized steel - cpvc plastic |

| | | | |
|---------------------------------|---------------|------------------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 21 13 16.00 20 | DRY-PIPE FIRE SPRINKLER SYSTEMS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | automatic dry pipe fire extinguishing sprinkler system |
| Density of Application of Water | UFGS 1.3.3 | L/min/sq.m (gpm/sf) | insert value |
| Aboveground Piping Systems | UFGS 2.1 | n/a | steel |
| Buried Water Piping Systems | UFGS 2.2 | n/a | outside-coated, cement-mortar-lined ductile-iron |

| | | | |
|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 21 13 17.00 10 | DRY PIPE SPRINKLER SYSTEM, FIRE PROTECTION 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | dry pipe sprinkler system |

| Attribute | Source | Unit | Value |
|---------------------------------|---------------|------------------------|--|
| Density of Application of Water | UFGS 1.2.1 | L/min/sq.m (gpm/sf) | insert value |
| Underground Piping Components | UFGS 2.4 | n/a | ductile iron with cement mortar lining |
| Aboveground Piping Components | UFGS 2.5 | n/a | black steel – galvanized steel |
| Sprinklers | UFGS 2.11 | n/a | pendant – upright – corrosion resistant |
| UFGS Section and Date | UFGS MAY 2012 | 21 13 18.00 10 | PREACTION AND DELUGE SPRINKLER SYSTEMS, FIRE PROTECTION 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | preaction sprinkler system – deluge sprinkler system |
| Density of Application of Water | UFGS 1.2.1 | L/min/sq.m (gpm/sf) | insert value |
| Underground Piping Systems | UFGS 2.4 | n/a | ductile iron with cement mortar lining |
| Aboveground Piping Components | UFGS 2.5 | n/a | black steel – galvanized steel |
| Sprinklers | UFGS 2.10 | n/a | pendant – upright – corrosion resistant |
| UFGS Section and Date | UFGS MAY 2012 | 21 13 19.00 20 | [DELUGE] [PREACTION] FIRE SPRINKLER SYSTEMS 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | automatic deluge fire extinguishing sprinkler system – automatic preaction fire extinguishing sprinkler system |
| Density of Application of Water | UFGS 1.3.3 | L/min/sq.m (gpm/sf) | insert value |
| Aboveground Piping Systems | UFGS 2.1 | n/a | steel |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------------|---|
| Buried Water Piping Systems | UFGS 2.2 | n/a | outside-coated cement-mortar-lined ductile-iron |
| UFGS Section and Date | UFGS MAY 2012 | 21 13 20.00 20 | FOAM FIRE EXTINGUISHING FOR AIRCRAFT HANGARS 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3.1 | n/a | aqueous film forming foam deluge sprinkler system – aqueous film forming foam pre-action sprinkler system |
| Solution Application Density | UFGS 2.1.5 | mL/sec/sq.m (gpm/sf) | 110 mL/sec/sq.m (0.16 gpm/sf) |
| Sprinkler System Design | UFGS 1.3.1 | n/a | deluge aqueous film forming foam – pre-action aqueous film forming foam |
| Aboveground Piping Systems | UFGS 2.19 | n/a | steel |
| Buried Piping Systems | UFGS 2.20 | n/a | outside-coated cement-mortar-lined ductile-iron |
| UFGS Section and Date | UFGS MAY 2012 | 21 13 21.00 20 | FOAM FIRE EXTINGUISHING FOR FUEL TANK PROTECTION 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3.1 | n/a | aqueous film forming foam fuel tank protection system |
| Solution Application Density | UFGS 2.1.4 | mL/sec/sq.m (gpm/sf) | insert value |
| Aboveground Piping Systems | UFGS 2.18 | n/a | steel |
| Buried Piping Systems | UFGS 2.19 | n/a | outside-coated cement-mortar-lined ductile-iron |

| Attribute | Source | Unit | Value |
|--|---------------|----------------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 21 13 22.00 20 | FOAM FIRE EXTINGUISHING FOR HAZ/FLAM MATERIAL FACILITY 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | foam pre-action sprinkler system – foam dry-pipe sprinkler system – foam deluge sprinkler system |
| Solution Application Density | UFGS 2.1.6 | mL/sec/sq.m (gpm/sf) | insert value |
| Aboveground Piping Systems | UFGS 2.19 | n/a | steel |
| Buried Piping Systems | UFGS 2.20 | n/a | outside-coated cement-mortar-lined ductile-iron |
| UFGS Section and Date | UFGS MAY 2012 | 21 13 24.00 10 | AQUEOUS FILM-FORMING FOAM (AFFF) FIRE PROTECTION SYSTEM 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | wet-pipe foam-water fire protection system – preaction foam-water fire protection system – deluge foam-water fire protection system |
| Fire Protection System | UFGS 1.2 | n/a | wet-pipe foam-water – preaction foam-water – deluge foam-water |
| Underground Piping Systems | UFGS 2.5 | n/a | outside-coated cement-mortar-lined ductile-iron |
| Aboveground Piping Systems for Solution | UFGS 2.6 | n/a | steel |
| Aboveground Piping Systems for Concentrate | UFGS 2.7 | n/a | stainless steel |

| Attribute | Source | Unit | Value |
|---------------------------------|---------------|------------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 21 13 26.00 40 | DELUGE FIRE-SUPPRESSION SPRINKLER SYSTEMS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | open-head fire extinguishing sprinkler system – pre-action fire extinguishing sprinkler system |
| Density of Application of Water | UFGS 2.2.5 | L/min/sq.m (gpm/sf) | insert value |
| Detection Systems | UFGS 2.3 | n/a | spot heat detection – smoke detection |
| Aboveground Piping Systems | UFGS 2.6 | n/a | carbon steel |
| Buried Piping Systems | UFGS 2.7 | n/a | outside-coated cement-mortar-lined ductile-iron |
| UFGS Section and Date | UFGS MAY 2012 | 21 21 00.00 40 | CARBON-DIOXIDE FIRE-EXTINGUISHING SYSTEMS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2.1 | n/a | high-pressure carbon dioxide total flooding system |
| Piping | UFGS 2.2.1 | n/a | galvanized ferrous piping |
| UFGS Section and Date | UFGS MAY 2012 | 21 21 00 | FIRE EXTINGUISHING SPRINKLER SYSTEMS (RESIDENTIAL) 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|---|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | automatic wet pipe fire extinguishing sprinkler system |
| Aboveground Piping Systems | UFGS 2.1 | n/a | steel |
| Buried Water Piping Systems | UFGS 2.2 | n/a | polyvinylchloride |

| UFGS Section and Date | UFGS MAY 2012 | 21 21 01.00 20 | CARBON DIOXIDE FIRE EXTINGUISHING (HIGH PRESSURE) 11/09 |
|------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | high-pressure carbon dioxide hose reel extinguishing system – high-pressure carbon dioxide underfloor flooding extinguishing system |
| Piping | UFGS 2.2 | n/a | steel |

| UFGS Section and Date | UFGS MAY 2012 | 21 21 02.00 20 | CARBON DIOXIDE FIRE EXTINGUISHING (LOW PRESSURE) 11/09 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| System Description | UFGS 1.4 | n/a | low-pressure carbon dioxide hose reel – low-pressure carbon dioxide underfloor – low-pressure carbon dioxide room flooding |
| Piping | UFGS 2.2 | n/a | hot-dipped galvanized steel |
| UFGS Section and Date | UFGS MAY 2012 | 21 21 03.00 10 | WET CHEMICAL FIRE EXTINGUISHING SYSTEM 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | wet chemical fire extinguishing system for cooking equipment |
| Piping | UFGS 2.2 | n/a | stainless steel |
| UFGS Section and Date | UFGS MAY 2012 | 21 22 00.00 20 | HALON 1301 FIRE EXTINGUISHING 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | halon underfloor flooding extinguishing system – halon room flooding extinguishing system |
| Piping | UFGS 2.1 | n/a | black steel – zinc-coated steel |
| UFGS Section and Date | UFGS MAY 2012 | 21 22 00.00 40 | CLEAN AGENT FIRE EXTINGUISHING SYSTEMS 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |

| Attribute | Source | Unit | Value |
|-----------------------|-------------|-------|--|
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | clean agent fire protection system |
| Piping | UFGS 2.2.1 | n/a | galvanized ferrous piping |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 21 23 00.00 20 | WET CHEMICAL FIRE EXTINGUISHING FOR KITCHEN CABINET 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 13 | Non Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | preengineered wet chemical fire extinguishing system for protection of cooking equipment |
| Piping | UFGS 2.1 | n/a | stainless steel – chrome plated |

| | | | |
|------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 21 30 00 | FIRE PUMPS 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 33 11 | Water Based Suppression Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Rated Flow | COBie Guide | L/s (g/s) | insert value |
| Churn Pressure | COBie Guide | kPa (psig) | insert value |
| Controller Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |

| Attribute | Source | Unit | Value |
|---------------------------------|---------------|-------------------|---|
| System Description | UFGS 1.2 | n/a | fire pumps |
| Fire Pump Operation | UFGS 1.6.1 | n/a | pressure drop – tripping of sprinkler system – manually |
| Underground Piping Components | UFGS 2.4 | n/a | outside-coated cement-mortar-lined ductile-iron pipe |
| Aboveground Piping Components | UFGS 2.5 | n/a | black steel – steel – copper |
| UFGS Section and Date | UFGS MAY 2012 | 22 00 00 | PLUMBING, GENERAL PURPOSE 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-31 00 00 | Plumbing Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| Waste | COBie Guide | WSFU | insert water supply fixture units required |
| Vent | COBie Guide | WSFU | insert water supply fixture units required |
| Cold Water | COBie Guide | WSFU | insert water supply fixture units required |
| Hot Water | COBie Guide | WSFU | insert water supply fixture units required |
| Sanitary Fixture Water | COBie Guide | liter/flush (gpf) | insert value |
| Maximum Flow Rate | COBie Guide | L/min (gpm) | insert value |
| System Description | UFGS 1.2 | n/a | standard plumbing products |
| Pipe Hangers, Inserts, Supports | UFGS 2.2 | n/a | metal suitable for service |
| Valves | UFGS 2.3 | n/a | backwater – relief – thermostatic mixing – wall – lawn - yard |
| Fixtures | UFGS 2.4 | n/a | lavatories – water closets – urinals – sinks – coolers – bathtubs – shower stalls – shower floors – emergency eyewash and shower |
| Backflow Preventers | UFGS 2.5 | n/a | reduced pressure assemblies – double check valve assemblies – nonpressure vacuum type – pressure type |
| Drains | UFGS 2.6 | n/a | floor drains – shower drains – bathtub drains – area drains – floor sinks – boiler room drains – pit drains – roof drains – pool drains |
| Shower Pans | UFGS 2.7 | n/a | copper shower pans – plasticized polyvinyl chloride shower pans – nonplasticized polyvinyl chloride shower pans |
| Traps | UFGS 2.8 | n/a | plastic – copper-alloy |
| Interceptors | UFGS 2.9 | n/a | grease interceptors – oil interceptors – sand interceptors |
| Water Heaters | UFGS 2.10 | n/a | automatic – instantaneous – electric instantaneous tankless |
| Hot-Water Storage Tanks | UFGS 2.11 | n/a | cement-lined steel – glass-lined steel |
| Pumps | UFGS 2.12 | n/a | sump pumps – circulating pumps – booster pumps – sewage pumps |
| Water Pressure Booster System | UFGS 2.13 | n/a | constant speed pumping system – hydro-pneumatic water pressure system – variable speed pumping system |
| Compressed Air System | UFGS 2.14 | n/a | air compressors – lubricated compressors – air receivers |

| Attribute | Source | Unit | Value |
|----------------------------------|-----------|------|--|
| Domestic Water Service Meter | UFGS 2.15 | n/a | positive displacement type – turbine type |
| Pool Water Safety Vacuum Release | UFGS 2.16 | n/a | vacuum monitoring – power supply monitoring – low vacuum sensing and alarm |
| Electrical Work | UFGS 2.17 | n/a | motors rated for continuous duty – motor starters - controls |
| Miscellaneous Piping Items | UFGS 2.18 | n/a | escutcheon plates – pipe sleeves – pipe hangers – nameplates - labels |

| UFGS Section and Date | UFGS MAY 2012 | 22 00 70 | PLUMBING, HEALTHCARE FACILITIES 11/11 |
|---------------------------------|------------------------|-------------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-31 00 00 | Plumbing Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.2.1 | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| Waste | COBie Guide | WSFU | insert water supply fixture units required |
| Vent | COBie Guide | WSFU | insert water supply fixture units required |
| Cold Water | COBie Guide | WSFU | insert water supply fixture units required |
| Hot Water | COBie Guide | WSFU | insert water supply fixture units required |
| Sanitary Fixture Water | COBie Guide | liter/flush (gpf) | insert value |
| Maximum Flow Rate | COBie Guide | L/min (gpm) | insert value |
| System Description | UFGS 1.2 | n/a | operable plumbing systems |
| Pipe and Fittings | UFGS 2.4 | n/a | domestic water piping – deionized water piping – drainage piping – pressure drainage piping – exposed piping |
| Pipe Joint Materials | UFGS 2.5 | n/a | couplings – flange gaskets – elastomeric seals – flanged fittings |
| Miscellaneous Materials | UFGS 2.6 | n/a | water hammer arrestor – copper strips – hose clamps – metallic cleanouts – fixture setting compound - thermometers |
| Pipe Insulation Material | UFGS 2.7 | n/a | thermal insulation |
| Pipe Hangers, Inserts, Supports | UFGS 2.8 | n/a | ferrous – non-ferrous in MRI suites |
| Valves | UFGS 2.9 | n/a | butterfly – gate – swing check – ball – plug – globe – angle – backwater – vacuum relief – water pressure reducing |
| Plumbing Fixtures | UFGS 2.10 | n/a | water coolers – emergency fixtures – lavatories – service basin – showers – sinks – urinals – water closets – hose bibs and hydrants |
| Backflow Preventers | UFGS 2.11 | n/a | reduced pressure – double check valve – nonpressure vacuum breakers - pressure type vacuum breakers |
| Drains and Backwater Valves | UFGS 2.12 | n/a | area drains – floor and shower drains – floor sinks – roof drains – sight drains – backwater valves |
| Cleanouts | UFGS 2.13 | n/a | coated cast-iron bodies |
| Traps | UFGS 2.14 | n/a | fixture traps – drain traps |
| Trap Primer Assemblies | UFGS 2.15 | n/a | fully automatic |

| Attribute | Source | Unit | Value |
|---------------------------------|---------------|----------------|--|
| Interceptors | UFGS 2.16 | n/a | grease interceptors – oil interceptors |
| Water Heaters | UFGS 2.17 | n/a | automatic – instantaneous – electric instantaneous tankless |
| Hot-Water Storage Tanks | UFGS 2.18 | n/a | cement-lined steel – glass-lined steel |
| Pumps | UFGS 2.19 | n/a | sump pumps – elevator sump pumps – circulating pumps – booster pumps – sewage pumps |
| Water Pressure Booster System | UFGS 2.20 | n/a | constant speed pumping system – variable speed pumping system |
| Domestic Water Service Meter | UFGS 2.21 | n/a | positive displacement type – turbine type |
| Copper-Silver Ionization System | UFGS 2.22 | n/a | controller with electrode cells and flow meter |
| Electrical Work | UFGS 2.23 | n/a | motors rated for continuous duty – motor starters - controls |
| UFGS Section and Date | UFGS MAY 2012 | 22 05 48.00 20 | MECHANICAL SOUND, VIBRATION, AND SEISMIC CONTROL 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 29 19 11 | Sound, Vibration and Seismic Control Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | vibration isolation and seismic snubbing for mechanical and electrical equipment |
| Isolator Types | UFGS 2.2 | n/a | floor-mounted isolators – spring isolators – suspension isolators – inertia bases – flexible connectors – seismic snubbers |
| UFGS Section and Date | UFGS MAY 2012 | 22 05 83.63 | CURED-IN-PLACE PIPE (CIPP) LINING 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 39 00 | Piping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | cured-in-place lining systems for piping and conduit |
| Lining Materials | UFGS 2.1 | n/a | lining tube – resin |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 22 07 19.00 40 | PLUMBING PIPING INSULATION 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 63 11 | Pipe Insulation |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | non-combustible thermal-insulation system materials |
| Insulation Materials | UFGS 2.1 | n/a | mineral fiber – cellular elastomer – cellular glass – calcium silicate – fiberglass - polyisocyanurate |
| Adhesives | UFGS 2.2 | n/a | cloth – vapor-barrier material – cellular elastomer |
| Insulating Cement | UFGS 2.3 | n/a | general purpose – finishing |
| Caulking | UFGS 2.4 | n/a | elastomeric joint sealant |
| Corner Angles | UFGS 2.5 | n/a | aluminum corner angle piping insulation with kraft backing |
| Jacketing | UFGS 2.6 | n/a | aluminum – asphalt-saturated – stainless steel – glass cloth - PVC |
| Coatings | UFGS 2.7 | n/a | outdoor vapor barrier – indoor vapor-barrier – nonvapor-barrier – cellular-elastomer |
| Tape | UFGS 2.8 | n/a | knitted elastic cloth glass lagging |
| UFGS Section and Date | UFGS MAY 2012 | 22 10 00.00 10 | VERTICAL PUMPS, AXIAL-FLOW AND MIXED-FLOW IMPELLER-TYPE 07/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 17 00 | Pumps |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Rated Flow | COBie Guide | L/s (g/s) | insert value |

| Attribute | Source | Unit | Value |
|-----------------------------|-------------|---------------|--|
| Churn Pressure | COBie Guide | kPa (psig) | insert value |
| Controller Type | COBie Guide | n/a | insert value |
| System Description | UFGS 1.3 | n/a | vertical axial-flow or mixed-flow, single or two stage impeller type pumps |
| Discharge Capacity | UFGS 1.3.2 | L/s (gal/min) | insert value, against static head at applicable elevations |
| Metalwork | UFGS 2.2.1 | n/a | aluminum-bronze – cast iron – steel – copper alloy |
| Speed | UFGS 2.3.1 | r/min (rpm) | insert value |
| Efficiency at Head Capacity | UFGS 2.3.3 | percent | insert value |

| UFGS Section and Date | UFGS MAY 2012 | 22 11 23.00 10 | SUBMERSIBLE PUMP, AXIAL-FLOW AND MIXED-FLOW TYPE 07/07 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 17 00 | Pumps |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Rated Flow | COBie Guide | L/s (g/s) | insert value |
| Churn Pressure | COBie Guide | kPa (psig) | insert value |
| Controller Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | pumping units for pumping stations |
| Discharge Capacity | UFGS 1.3.7 | L/s (gal/min) | insert value, against static head at applicable elevations |
| Efficiency at Head Capacity | UFGS 1.3.8 | percent | insert value |
| Metalwork | UFGS 2.2.1 | n/a | aluminum-bronze – cast iron – steel – copper alloy |
| Speed | UFGS 2.3.2.1 | r/min (rpm) | insert value |

| UFGS Section and Date | UFGS MAY 2012 | 22 13 29 | SANITARY SEWERAGE PUMPS 02/11 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 17 00 | Pumps |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|---|
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Rated Flow | COBie Guide | L/s (g/s) | insert value |
| Churn Pressure | COBie Guide | kPa (psig) | insert value |
| Controller Type | COBie Guide | n/a | insert value |
| System Description | UFGS 2.1 | n/a | sewage and sludge pumps for domestic type waste |
| Pump Type | UFGS 2.1 | n/a | centrifugal solids handling – submersible centrifugal – screw – plunger – progressive cavity – diaphragm – impeller – rotary lobe |
| Pump Service | UFGS 2.2.1 | n/a | insert value |
| Pump Design Operating Point | UFGS 2.2.1 | L/s (gpm) | insert value, at designated head |
| Pump Impeller Type | UFGS 2.2.1 | n/a | insert value |
| Pump Operating Speed | UFGS 2.2.1 | r/min (rpm) | insert value |
| Pump Motor Type | UFGS 2.2.1 | n/a | insert type |
| UFGS Section and Date | UFGS MAY 2012 | 22 13 36 | PNEUMATIC SEWAGE EJECTORS 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 17 00 | Pumps |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Rated Flow | COBie Guide | L/s (g/s) | insert value |
| Churn Pressure | COBie Guide | kPa (psig) | insert value |
| Controller Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | duplex pneumatic sewage ejectors |
| Maximum Sphere Size Ejection | UFGS 1.2 | mm (in) | insert diameter |
| UFGS Section and Date | UFGS MAY 2012 | 22 14 29.00 40 | SUMP PUMPS 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 17 00 | Pumps |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|-----------------------|-------------|------------|--|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Rated Flow | COBie Guide | L/s (g/s) | insert value |
| Churn Pressure | COBie Guide | kPa (psig) | insert value |
| Controller Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | centrifugal, wet-pit sump pumps - submersible sump pumps |

| UFGS Section and Date | UFGS MAY 2012 | 22 15 09.00 40 | GENERAL SERVICE COMPRESSED-AIR SYSTEMS CLEANING PROCEDURES 02/11 |
|----------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 39 00 | Piping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | cleaning processes for piping systems, components and tanks |
| Cleanliness Level Classification | UFGS 1.4.2 | n/a | class 1 - class 2 - class 3 - class 4 |
| System Cleaning Materials | UFGS 2.1 | n/a | demineralized water - drying gas - preservation gas - acid - propyl bromide |

| UFGS Section and Date | UFGS MAY 2012 | 22 15 13.16 40 | HIGH-PRESSURE COMPRESSED-AIR PIPING, PIPING COMPONENTS, AND VALVES, STAINLESS 02/11 |
|------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 39 00 | Piping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | aboveground and underground pressurized piping systems |

| Attribute | Source | Unit | Value |
|------------------------------|----------|------|--|
| Underground Piping Materials | UFGS 2.1 | n/a | black carbon steel – corrosion-resistant steel |
| Aboveground Piping Materials | UFGS 2.2 | n/a | black carbon steel – corrosion-resistant steel |
| Air Compressors | UFGS 2.3 | n/a | continuous duty piston type |
| Manual Valves | UFGS 2.4 | n/a | black carbon steel – corrosion-resistant steel |
| Piping Specialties | UFGS 2.5 | n/a | pressure gages – pressure receiver gages – pneumatic transmitters - thermometers |

| UFGS Section and Date | UFGS MAY 2012 | 22 15 14.00 40 | GENERAL SERVICE COMPRESSED-AIR SYSTEMS, LOW PRESSURE 02/11 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 21 00 | Compressors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | aboveground and underground pressurized piping systems |
| Underground Piping Materials | UFGS 2.1 | n/a | black carbon steel – galvanized carbon steel |
| Aboveground Piping Materials | UFGS 2.2 | n/a | black carbon steel – galvanized carbon steel |
| Piping Specialties | UFGS 2.3 | n/a | air pressure reducing stations – air line lubricators – compressed air receivers – pressure gages - thermometers |
| Air Compressors | UFGS 2.4 | n/a | continuous duty piston type |
| Valves | UFGS 2.5 | n/a | ball – butterfly – diaphragm control – gage cocks – gate valves – globe and angle valves – eccentric plug valves |

| UFGS Section and Date | UFGS MAY 2012 | 22 15 19.13 20 | LARGE NONLUBRICATED RECIPROCATING AIR COMPRESSORS (OVER 300 HP) 11/09 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 21 15 | Reciprocating Compressors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | large nonlubricated reciprocating air compressors |

| Attribute | Source | Unit | Value |
|------------------------------------|------------|------------|--------------|
| Net Compressed Air Output | UFGS 2.2.2 | L/s (SCFM) | insert value |
| Compressor Cooling Water Flow Rate | UFGS 2.2.2 | L/s (gpm) | insert value |
| Unloaded Compressor Horsepower | UFGS 2.2.2 | kW (hp) | insert value |

| UFGS Section and Date | UFGS MAY 2012 | 22 15 19.19 20 | NONLUBRICATED ROTARY SCREW AIR COMPRESSORS (100 HP AND LARGER) 05/11 |
|------------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 21 17 | Rotary Compressors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | large nonlubricated rotary screw air compressors |
| Net Compressed Air Output | UFGS 2.2.2 | L/s (SCFM) | insert value |
| Compressor Cooling Water Flow Rate | UFGS 2.2.2 | L/s (gpm) | insert value |
| Unloaded Compressor Horsepower | UFGS 2.2.2 | kW (hp) | insert value |

| UFGS Section and Date | UFGS MAY 2012 | 22 15 26.00 20 | HIGH AND MEDIUM PRESSURE COMPRESSED AIR PIPING 04/06 |
|------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 39 00 | Piping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | non-breathing-air compressed air systems |
| Air Compressor | UFGS 2.1/2.4 | n/a | high pressure – medium pressure |
| Compressed Air Dryer | UFGS 2.2/2.6/2.8 | n/a | high pressure – medium pressure – medium pressure chilled water type – Desiccant type |
| Air Receivers and Separators | UFGS 2.3/2.5 | n/a | high pressure – medium pressure |

| Attribute | Source | Unit | Value |
|------------------------------------|---------------|----------------|---|
| Air Piping and Accessories | UFGS 2.9/2/10 | n/a | high pressure – medium pressure |
| UFGS Section and Date | UFGS MAY 2012 | 22 16 19.26 20 | LARGE CENTRIFUGAL AIR COMPRESSORS (OVER 200 HP) 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 21 13 | Centrifugal Compressors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | large centrifugal air compressors |
| Net Compressed Air Output | UFGS 2.2.2 | L/s (SCFM) | insert value |
| Compressor Cooling Water Flow Rate | UFGS 2.2.2 | L/s (gpm) | insert value |
| Unloaded Compressor Horsepower | UFGS 2.2.2 | kW (hp) | insert value |
| UFGS Section and Date | UFGS MAY 2012 | 22 31 00 | WATER SOFTENERS, CATION-EXCHANGE (SODIUM CYCLE) 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 55 27 11 | Water Softeners |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | fully automatic water softening - semi-automatic water softening - manual water softening |
| Equipment Capacity | UFGS 2.2.1 | liters (gal) | insert value, |
| Water Hardness Influent | UFGS 2.2.1 | mg/L | insert value |
| Water Hardness Effluent | UFGS 2.2.1 | mg/L | insert value |
| Generation Interval | UFGS 2.2.1 | hours | insert value |
| UFGS Section and Date | UFGS MAY 2012 | 22 33 30.00 10 | SOLAR WATER HEATING EQUIPMENT 04/08 |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 53 00 | Solar Water Heating Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - water saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | solar domestic and service water heating equipment |
| Solar Collector Construction | UFGS 2.4.1 | n/a | flat-plate liquid internally manifold type |
| Array Aperture Area | UFGS 2.5.1 | sq.m (sq.ft.) | insert value |
| UFGS Section and Date | UFGS MAY 2012 | 22 60 70 | GAS AND VACUUM SYSTEMS FOR HEALTHCARE FACILITIES 05/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 33 00 | Medical Gas Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.2.2 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | medical and dental gas, support and vacuum systems for healthcare facilities |
| Healthcare Code Criteria | UFGS 1.2 | n/a | level 1 – level 3 |
| Gas Systems | UFGS 1.2 | n/a | oxygen – nitrous oxide – dental compressed air – lab compressed air – process compress air – nitrogen – carbon dioxide |
| Vacuum Systems | UFGS 1.2 | n/a | dental surgical – oral evacuation – high-volume laboratory dust evacuation – medical surgical – waste anesthetic gas disposal |
| UFGS Section and Date | UFGS MAY 2012 | 22 66 53.00 40 | LABORATORY CHEMICAL-WASTE AND VENT PIPING 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 39 00 | Piping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|--|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | corrosion-resistant chemical-waste drainage systems |
| Piping Type | UFGS 2.1 | n/a | borosilicate glass - high-silcon cast iron - polyethylene - polyvinyl chloride |

| UFGS Section and Date | UFGS MAY 2012 | 23 00 00 | AIR SUPPLY, DISTRIBUTION, VENTILATION, AND EXHAUST SYSTEMS 08/10 |
|------------------------------|------------------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 49 00 | HVAC Ductwork |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.4.7 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | air supply, distribution, ventilation and exhaust portions of an HVAC system |
| Duct Systems | UFGS 2.10 | n/a | metal ductwork - duct access doors - dampers - air deflectors - louvers - air vents - radon exhaust ductwork |
| Air Systems Equipment | UFGS 2.11 | n/a | fans - coils - air filters |
| Air Handling Units | UFGS 2.12 | n/a | field-fabricated - factory-fabricated casings coils filters fans |
| Terminal Units | UFGS 2.13 | n/a | room fan-coil units - coil induction units - variable air volume and dual duct terminal units - unit ventilators |
| Emergency Recovery Devices | UFGS 2.14 | n/a | rotary wheel - run-around-coil - heat pipe - Desiccant wheel - plate heat exchanger |
| Components | UFGS 2.16 | n/a | water piping - refrigerant piping - condensate drain lines - backflow preventers - insulation - controls |

| UFGS Section and Date | UFGS MAY 2012 | 23 01 30.41 | HVAC SYSTEM CLEANING 08/10 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 00 00 | HVAC Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |

| Attribute | Source | Unit | Value |
|-----------------------|-------------|-------|--|
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | cleaning of HVAC systems |
| Components | UFGS 1.2 | n/a | HVAC cleaning materials |

| UFGS Section and Date | UFGS MAY 2012 | 23 03 00.00 20 | BASIC MECHANICAL MATERIALS AND METHODS 08/10 |
|------------------------------|--------------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 00 00 | HVAC Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.4.5.3 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | mechanical general requirements for specification divisions 21, 22, 23 |

| UFGS Section and Date | UFGS MAY 2012 | 23 05 15 | COMMON PIPING FOR HVAC 02/09 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 00 00 | HVAC Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | standard mechanical work piping |
| Pipe and Fittings | UFGS 2.2 | n/a | type bcs - type bcs-125 - type gcs - type gcs-ewv - type cisp-dwv - type cpr-a - type cpr-u - type cpr-ins |
| Piping Specialties | UFGS 2.3 | n/a | air separator - air vents - compression takes - piping expansion joints - faucets - gages - thermometers |

| Attribute | Source | Unit | Value |
|-----------|----------|------|--|
| Valves | UFGS 2.4 | n/a | ball – butterfly – drain vent and gage cocks – gate – globe and angle – standard check – nonslam check |

| UFGS Section and Date | UFGS MAY 2012 | 23 05 48.00 40 | VIBRATION AND SEISMIC CONTROLS FOR HVAC PIPING AND EQUIPMENT 02/11 |
|-------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 00 00 | HVAC Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | vibration isolation systems for air-conditioning equipment |
| Vibration Isolation Mountings | UFGS 2.1.2 | n/a | type a – type b – type c – type d – type e – type f – type g |
| Vibration Isolation Bases | UFGS 2.1.3 | n/a | type r – type s – type u – type cib |

| UFGS Section and Date | UFGS MAY 2012 | 23 05 93 | TESTING, ADJUSTING, AND BALANCING FOR HVAC 08/09 |
|------------------------------|------------------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 00 00 | HVAC Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.5.3 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | testing, adjusting and balancing of heating ventilation and air-conditioning air and water distribution system |
| Components | UFGS 2.1 | n/a | duct air leakage test procedures – testing adjusting and balancing procedures |

| UFGS Section and Date | UFGS MAY 2012 | 23 07 00 | THERMAL INSULATION FOR MECHANICAL SYSTEMS 08/10 |
|--------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 63 00 | Mechanical Insulation and Linings |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|------------------------|-------|---|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.4.2 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | thermal insulation on HVAC and plumbing systems |
| Components | UFGS 2.1/2.2 | n/a | vapor-retarding jackets – nonvapor-retarding jackets |
| Pipe Insulation | UFGS 2.3 | n/a | aboveground cold pipeline – aboveground hot pipe line – aboveground dual temperature pipeline – below-ground pipeline |
| Duct Insulation | UFGS 2.4 | n/a | duct – kitchen exhaust ductwork – acoustical duct lining – duct insulation jackets – weatherproof duct insulation |

| UFGS Section and Date | UFGS MAY 2012 | 23 08 00.00 10 | COMMISSIONING OF HVAC SYSTEMS 01/08 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 00 00 | HVAC Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | commissioning of HVAC systems |
| Components | UFGS 3.1 | n/a | performance and functional test procedures forms checklists |

| UFGS Section and Date | UFGS MAY 2012 | 23 08 01.00 20 | TESTING INDUSTRIAL VENTILATION SYSTEMS 04/06 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 00 00 | HVAC Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| System Description | UFGS 1.2 | n/a | air flow testing of industrial ventilation systems |
| Components | UFGS 3.1 | n/a | test procedures and forms |
| UFGS Section and Date | UFGS MAY 2012 | 23 09 13.34 40 | CONTROL VALVES, SELF-CONTAINED 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 31 00 | Valves |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | self-contained control and relief valves |
| Temperature Valves | UFGS 2.1/2.2 | n/a | temperature-control type 1 class 2 – temperature control type 2 class 2 style a - temperature-regulator |
| Pressure Valves | UFGS 2.4 | n/a | water pressure-regulating – water pressure-relief – pilot-operated pressure-relief |
| UFGS Section and Date | UFGS MAY 2012 | 23 09 23.13 20 | BACnet DIRECT DIGITAL CONTROL SYSTEMS FOR HVAC 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 15 23 | HVAC Controls |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | direct digital control of HVAC systems |
| Components | UFGS 2.1/2.2/2.3 | n/a | DDC system – sensors and input hardware – output hardware |
| UFGS Section and Date | UFGS MAY 2012 | 23 09 23 | LONWORKS DIRECT DIGITAL CONTROL FOR HVAC AND OTHER BUILDING CONTROL SYSTEMS 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 11 00 | General Instruments and Controls |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|-------|---|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | direct digital control for HVAC and other building control systems |
| Components | UFGS 2.1/2.2/2.3 | n/a | equipment – valves – dampers – sensors – indicating devices – output devices - hardware |

| UFGS Section and Date | UFGS MAY 2012 | 23 09 33.00 40 | ELECTRIC AND ELECTRONIC CONTROL SYSTEM FOR HVAC 08/10 |
|------------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 15 23 | HVAC Controls |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | controls and instrumentation for air handling equipment |
| Automatic Temperature Control Type | UFGS 1.2 | n/a | equivalent pneumatic – electronic – electric/electronic – low-voltage electric – pneumatic/electronic |
| Components | UFGS 2.1/2.2/2.3 | n/a | sensors - thermometers – pressure gages – valves – pneumatic components – air-supply - dampers |

| UFGS Section and Date | UFGS MAY 2012 | 23 09 53.00 20 | SPACE TEMPERATURE CONTROL SYSTEMS 02/10 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 11 00 | General Instruments and Controls |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | space temperature control system for HVAC system |
| Temperature Control Type | UFGS 1.3 | n/a | electric - analog electronic - pneumatic |
| Components | UFGS 2.1/2.2/2.3 | n/a | actuators - control valves - dampers - sensors - thermowells - thermostats - valves - gages - controllers |
| UFGS Section and Date | UFGS MAY 2012 | 23 11 25 | FACILITY GAS PIPING 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 39 00 | Piping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | low pressure facility gas piping systems |
| Components | UFGS 2.1/2.2/2.3 | n/a | piping - valves - risers - hangers and supports - valves |
| Gas Piping | UFGS 2.2 | n/a | steel pipe - aluminum pipe - copper tubing - steel tubing - thermoplastic pipe - fiberglass pipe |
| UFGS Section and Date | UFGS MAY 2012 | 23 21 13.00 20 | LOW TEMPERATURE WATER (LTW) HEATING SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | low temperature water heating system including hot water piping and terminal units |
| Components | UFGS 2.1/2.2/2.3 | n/a | pipe and fittings - central mechanical equipment - piping system equipment - terminal units |
| UFGS Section and Date | UFGS MAY 2012 | 23 21 13.23 20 | [HIGH] [MEDIUM] TEMPERATURE WATER SYSTEM WITHIN BUILDINGS 07/07 |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3.2 | n/a | high and medium temperature water piping systems inside of building mechanical rooms |
| Components | UFGS 2.1/2.2/2.3 | n/a | pipe and fittings – valves – hangers and supports – heat exchanger – steam producer |
| UFGS Section and Date | UFGS MAY 2012 | 23 22 13.35 40 | STEAM TRAPS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 37 15 | Steam Traps |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | steam traps |
| Components | UFGS 2.2/2.3/2.4 | n/a | type IB trap – type F&T trap – type T trap |
| UFGS Section and Date | UFGS MAY 2012 | 23 22 23.00 40 | STEAM CONDENSATE PUMPS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 17 00 | Pumps |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |

| Attribute | Source | Unit | Value |
|--------------------|------------------|------|--|
| Frequency | COBie Guide | Hz | insert value |
| Rated Flow | COBie Guide | L/s | insert value |
| Churn Pressure | COBie Guide | kPa | insert value |
| Controller Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | condensate return pump units and condensate steam pumps |
| Components | UFGS 2.1/2.2/2.3 | n/a | condensate return pumps – condensate receivers – reciprocating steam pumps |

| UFGS Section and Date | UFGS MAY 2012 | 23 22 25.00 40 | STEAM VALVES 02/11 |
|------------------------------|------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 31 00 | Valves |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | valves for steam and condensate systems |
| Components | UFGS 2.2/2.3/2.4 | n/a | gate valves – globe and angle valves – check valves – cone-plug balancing valves – eccentric plug valves |

| UFGS Section and Date | UFGS MAY 2012 | 23 22 26.00 20 | STEAM SYSTEM AND TERMINAL UNITS 02/10 |
|------------------------------|------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | steam, condensate and terminal units for heating |
| Components | UFGS 2.1/2.2/2.3 | n/a | high pressure piping – low pressure piping – fittings – valves - unit heaters – convertors – condensate return units – radiation units |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 23 23 00 | REFRIGERANT PIPING 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 39 00 | Piping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | refrigerant piping inside of buildings |
| Components | UFGS 2.1/2.2/2.3 | n/a | steel pipe – steel tubing – copper tubing – valves - gauges |
| UFGS Section and Date | UFGS MAY 2012 | 23 25 00 | CHEMICAL TREATMENT OF WATER FOR MECHANICAL SYSTEMS 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 55 00 | Liquid Treatment Components |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | chemical treatment of water for mechanical systems |
| Water Treatment | UFGS 2.6/2.7/2.8 | n/a | condenser water – chilled water – boilers and heat exchangers – hot water boilers – steam boilers |
| UFGS Section and Date | UFGS MAY 2012 | 23 31 13.00 40 | METAL DUCTS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 49 00 | HVAC Ductwork |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|---|
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | low, medium and high pressure ductwork for air conditioning systems |
| Components | UFGS 2.1/2.2 | n/a | galvanized steel ductwork – fittings – turning vanes – dampers – sound traps – connectors - hangers |
| Duct Applications | UFGS 3.3 | n/a | low pressure – rectangular – round – round high pressure |
| UFGS Section and Date | UFGS MAY 2012 | 23 33 56 | SELF-ACTING BLAST VALVES 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 31 00 | Valves |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | self-acting blast valves for protection of supply and exhaust air systems |
| Valve Material | UFGS 2.1 | n/a | iron – steel – corrosion resistant alloy steel – structural steel – stainless steel – aluminum |
| Components | UFGS 2.1/2.2 | n/a | valves mounted in casing supports – valves mounted in piping or ducts |
| UFGS Section and Date | UFGS MAY 2012 | 23 34 23.00 40 | HVAC POWER VENTILATORS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 31 21 | Power Ventilators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | power roof ventilators to exhaust air |
| Fan Type | UFGS 2.3 | n/a | centrifugal – propeller – vane axial |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|--|
| Ventilator Materials | UFGS 2.4 | n/a | aluminum alloy – zinc-coated steel – fibrous glass |
| UFGS Section and Date | UFGS MAY 2012 | 23 35 00.00 10 | OVERHEAD VEHICLE TAILPIPE [AND WELDING FUME] EXHAUST REMOVAL SYSTEM(S) 02/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 31 21 | Power Ventilators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | vehicle tailpipe and welding fume exhaust hoods |
| Components | UFGS 2.4/2.5 | n/a | ductwork fittings and cleanout – exhaust hose and tailpipe receptors - dampers |
| UFGS Section and Date | UFGS MAY 2012 | 23 35 19.00 20 | INDUSTRIAL VENTILATION AND EXHAUST 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 31 21 | Power Ventilators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.8 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | blower and exhaust systems for removal of flammable vapors |
| Components | UFGS 2.1/2.2/2.3 | n/a | fans – heat recovery system – fire dampers – dust and fume collection ductwork – vehicle tail pipe exhaust – welding exhaust |
| UFGS Section and Date | UFGS MAY 2012 | 23 36 00.00 40 | AIR TERMINAL UNITS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 41 00 | HVAC Air Terminals |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |

| Attribute | Source | Unit | Value |
|------------------------|------------------|-------|--|
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | air terminal units for air handling systems |
| Air Terminal Unit Type | UFGS 2.1/2.2/2.3 | n/a | bypass single-duct – fan-powered – induction air – shutoff single-duct – integral-diffuser – mixing boxes |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 37 13.00 40 | DIFFUSERS, REGISTERS, AND GRILLS 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 49 00 | HVAC Ductwork |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.2 | n/a | air diffusion devices connected to ductwork or mounted in equipment |
| Components | UFGS 2.2 | n/a | diffusers – registers – grills - troffers |

| | | | |
|------------------------------|------------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 23 40 00.00 10 | CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL (CBR) AIR FILTRATION SYSTEM 10/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 57 27 | Air Filters |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | chemical, biological, radiological air filtration systems |
| Components | UFGS 2.3/2.4/2.5 | n/a | filtration system housing – filters – adsorbers – handling kits – test sections – isolation dampers - ductwork |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 23 41 13.00 40 | PANEL FILTERS 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 57 27 | Air Filters |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.1 | n/a | filters for use with air handling equipment |
| Filter Types | UFGS 2.1 | n/a | disposable – cleanable – replaceable – automatic – high-efficiency particulate air |
| UFGS Section and Date | UFGS MAY 2012 | 23 51 43.00 20 | DUST AND GAS COLLECTOR, DRY SCRUBBER AND FABRIC FILTER TYPE 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 57 29 | Dust Collectors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | dry flue gas desulfurization scrubber and fabric filter baghouse systems |
| Components | UFGS 2.7/2.8/2.0 | n/a | spray dryer absorbers – fabric filter baghouses – pumps – valves – motors – ductwork – instrumentation - controls |
| UFGS Section and Date | UFGS MAY 2012 | 23 51 43.01 20 | MECHANICAL CYCLONE DUST COLLECTOR OF FLUE GAS PARTICULATES 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 57 29 | Dust Collectors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|-----------------------|-------------|-------|---|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | mechanical cyclone-type dust collectors |
| Components | UFGS 2.2 | n/a | hoppers – collecting and outlet tubes – heating systems – alarms – ductwork – insulation and casing |

| UFGS Section and Date | UFGS MAY 2012 | 23 51 43.02 20 | ELECTROSTATIC DUST COLLECTOR OF FLUE GAS PARTICULATES 04/06 |
|------------------------------|------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 57 29 | Dust Collectors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | electrostatic precipitators |
| Components | UFGS 2.4/2.5/2.6 | n/a | housings – hoppers – alarms – access provisions |

| UFGS Section and Date | UFGS MAY 2012 | 23 51 43.03 20 | FABRIC FILTER DUST COLLECTOR OF FLY ASH PARTICLES IN FLUE GAS 02/10 |
|------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 57 29 | Dust Collectors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | fabric filter type dust collectors |
| Components | UFGS 2.4/2.5/2.6 | n/a | ductwork system – hoppers – bag cleaning system – baghouse controls – access provisions |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 52 00 | HEATING BOILERS 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | packaged hot water and steam boiler systems |
| Boiler Type | UFGS 2.2 | n/a | firetube – watertube – cast iron – condensing – hot water heating – steam heating |
| Fuel Burning Equipment | UFGS 2.3 | n/a | gas burner – oil burner – combination gas-oil burner – steam atomizer – mechanical pressure atomizer |
| Components | UFGS 2.4/2.5/2.6 | n/a | combustion control – pumps – radiators – convectors – unit heaters – heating and ventilating units – air handling units |
| Fittings and Accessories | UFGS 2.12 | n/a | blowers – heaters – vents - gaskets – pipes – pipe connectors – valves – air vents – insulation – storage system – water treatment |
| UFGS Section and Date | UFGS MAY 2012 | 23 52 33.01 20 | STEAM HEATING PLANT WATERTUBE (SHOP ASSEMBLED) COAL/OIL OR COAL 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 21 | Water Tube Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |

| Attribute | Source | Unit | Value |
|---------------------|------------------|---------|--|
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | steam heating plant |
| Components | UFGS 2.2/2.3/2.4 | n/a | watertube boiler – economizer – burner – fans – breeching – stacks – dampers – ash handling – pollution controls |

| UFGS Section and Date | UFGS MAY 2012 | 23 52 33.02 20 | STEAM HEATING PLANT WATERTUBE (FIELD ERECTED) COAL/OIL OR COAL 11/08 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 21 | Water Tube Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | steam heating plant |

| Attribute | Source | Unit | Value |
|------------|------------------|------|--|
| Components | UFGS 2.2/2.3/2.4 | n/a | watertube boiler – economizer – burner – fans – breeching – stacks – dampers - fuel system – ash handling – pollution controls |

| UFGS Section and Date | UFGS MAY 2012 | 23 52 33.03 20 | WATER-TUBE BOILERS, OIL/GAS OR OIL 11/08 |
|------------------------------|----------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 21 | Water Tube Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide/UFGS 1.8 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | steam heating plant |
| Components | UFGS 2.2/2.3/2.4 | n/a | watertube boiler – economizer – burner – fans – breeching – stacks – dampers - fuel system |

| UFGS Section and Date | UFGS MAY 2012 | 23 52 43.00 10 | HEAT RECOVERY BOILERS 04/08 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |

| Attribute | Source | Unit | Value |
|---------------------|------------------|---------|--|
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | steam generating boilers |
| Components | UFGS 2.2/2.3/2.4 | n/a | boiler – economizer – condensate tank – heat exchangers – feedwater heater – piping – chemical treatment - control equipment |

| | | | |
|------------------------------|----------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 52 43.00 20 | LOW PRESSURE WATER HEATING BOILERS (UNDER 800,000 BTU/HR OUTPUT) 07/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | low pressure hot water heating boilers |
| Burners | UFGS 2.2 | n/a | atmospheric-type bas – gas-fired – oil-fired – gas and light oil-fired |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| Components | UFGS 2.3/2.4/2.5 | n/a | controls – make-up water station – feedwater treatment – stacks - breeching |
| UFGS Section and Date | UFGS MAY 2012 | 23 52 46.00 20 | LOW PRESSURE WATER HEATING BOILERS (OVER 800,000 BTU/HR OUTPUT) 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | low pressure hot water heating boilers |
| Burners | UFGS 2.2 | n/a | gas-fired – oil-fired – combination gas and light oil-fired |
| Components | UFGS 2.3/2.4/2.5 | n/a | controls – make-up water station – feedwater treatment – stacks - breeching |
| UFGS Section and Date | UFGS MAY 2012 | 23 52 49.00 20 | STEAM BOILERS AND EQUIPMENT (500,000 - 18,000,000 BTU/HR) 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |

| Attribute | Source | Unit | Value |
|---------------------|------------------|---------|--|
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | steam boilers |
| Boiler Type | UFGS 2.1 | n/a | packaged firetube – firetube – watertube – cast iron sectional |
| Components | UFGS 2.1/2.2/2.3 | n/a | boilers – breeching – blowdown equipment – feedwater equipment |

| UFGS Section and Date | UFGS MAY 2012 | 23 52 53.00 20 | STEAM BOILERS AND EQUIPMENT (18,000,000 - 60,000,000 BTU/HR) 04/06 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | packaged steam boilers |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| Components | UFGS 2.1/2.2/2.3 | n/a | boilers – breeching – stacks – blowdown equipment – feedwater equipment |
| UFGS Section and Date | UFGS MAY 2012 | 23 54 16.00 10 | HEATING SYSTEM; GAS-FIRED HEATERS 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | gas-fired heaters |
| Heaters | UFGS 2.3 | n/a | direct fired make-up air – indirect fired make-up – unit – infrared – wall furnace – duct furnace |
| Components | UFGS 2.3/2.4/2.5 | n/a | heaters – thermostats – vent piping – vent dampers - insulation |
| UFGS Section and Date | UFGS MAY 2012 | 23 54 19 | BUILDING HEATING SYSTEMS, WARM AIR 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | warm air heating systems |
| Furnaces | UFGS 2.1 | n/a | gas-fired – oil-fired |
| Components | UFGS 2.1/2.2/2.3 | n/a | self-contained furnaces – vent connections – controls – vent dampers – humidifiers - filters |
| UFGS Section and Date | UFGS MAY 2012 | 23 57 10.00 10 | FORCED HOT WATER HEATING SYSTEMS USING WATER AND STEAM HEAT EXCHANGERS 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|-------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | forced hot water heating system |
| Components | UFGS 2.2/2.3/2.4 | n/a | piping – valves – tanks – traps – heat exchangers – insulation – radiators – unit heaters – water treatment |

| UFGS Section and Date | UFGS MAY 2012 | 23 63 00.00 10 | COLD STORAGE REFRIGERATION SYSTEMS 10/07 |
|------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 37 00 | Refrigerant Condensing Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | refrigeration equipment for cold storage facilities |
| Condensers | UFGS 2.5/2.6/2.7 | n/a | compressor/condensing units – air-cooled condenser – water-cooled condenser – evaporative condensers |
| Components | UFGS 2.4/2.5/2.6 | n/a | condensers – unit coolers – controls – heat recovery – leak detectors – piping – valves – refrigerant accessories |

| UFGS Section and Date | UFGS MAY 2012 | 23 64 00 | PACKAGED WATER CHILLERS, ABSORPTION TYPE 08/09 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 21 11 | Absorption Chillers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|-----------------------------------|--------------------------|--------------|---|
| Power | COBie Guide | kW | insert value |
| Capacity | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Ambient Temp | COBie Guide | deg C (F) | insert value |
| Pressure Drop | COBie Guide | kPa (psig) | insert value |
| Entering Water Temperature | COBie Guide/UFGS 2.5.6.2 | deg C (F) | insert value |
| Leaving Water Temperature | COBie Guide/UFGS 2.5.6.2 | deg C (F) | insert value |
| Motor Controller | COBie Guide/UFGS 2.3 | n/a | insert value |
| Unloading Steps | COBie Guide | n/a | insert value |
| Chiller Media | COBie Guide | n/a | insert value |
| Chiller Type | COBie Guide | n/a | insert value |
| Refrigerant Type | COBie Guide/UFGS 2.5.4.6 | n/a | insert value |
| Energy Efficiency Ratio (EER) | COBie Guide | btu/hr to kW | insert value |
| Integrated Part-Load Value (IPLV) | COBie Guide/UFGS 2.5.1 | n/a | insert value |
| Heat Reclaim | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | absorption type packaged water chillers |
| Components | UFGS 2.4/2.5/2.6 | n/a | absorber – evaporator – condenser – generator - combustion burner assembly – controls |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 64 10 | WATER CHILLERS, VAPOR COMPRESSION TYPE 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 21 00 | Chillers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Power | COBie Guide | kW | insert value |
| Capacity | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Ambient Temp | COBie Guide | deg C (F) | insert value |
| Pressure Drop | COBie Guide | kPa (psig) | insert value |
| Entering Water Temperature | COBie Guide | deg C (F) | insert value |
| Leaving Water Temperature | COBie Guide | deg C (F) | insert value |

| Attribute | Source | Unit | Value |
|-----------------------------------|--------------|--------------|---|
| Motor Controller | COBie Guide | n/a | insert value |
| Unloading Steps | COBie Guide | n/a | insert value |
| Chiller Media | COBie Guide | n/a | insert value |
| Chiller Type | COBie Guide | n/a | insert value |
| Refrigerant Type | COBie Guide | n/a | insert value |
| Energy Efficiency Ratio (EER) | COBie Guide | btu/hr to kW | insert value |
| Integrated Part-Load Value (IPLV) | COBie Guide | n/a | insert value |
| Heat Reclaim | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | water chilling equipment |
| Chiller Type | UFGS 2.4/2.5 | n/a | vapor compression self-contained water chillers – vapor compression split-system water chillers |
| Components | UFGS 2.6/2.7 | n/a | refrigerant and oil – controls – compressors leak detectors |

| UFGS Section and Date | UFGS MAY 2012 | 23 64 26 | CHILLED, CHILLED-HOT, AND CONDENSER WATER PIPING SYSTEMS 08/09 |
|------------------------------|------------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 39 00 | Piping |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | chilled water, chilled-hot water and condenser water piping |
| Components | UFGS 2.2/2.3/2.4 | n/a | piping – tubing – valves – pumps – tanks – water treatment systems |

| UFGS Section and Date | UFGS MAY 2012 | 23 65 00 | COOLING TOWERS 08/08 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 23 00 | Cooling Towers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|--------------------|-------------|------|--|
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | induced mechanical draft cooling towers |
| Cooling Towers | UFGS 2.5 | n/a | factory-assembled cooling towers – field-assembled cooling towers |
| Components | UFGS 2.5 | n/a | cooling towers – drift eliminators – basin equipment – heat transfer surface |

| UFGS Section and Date | UFGS MAY 2012 | 23 69 00.00 20 | REFRIGERATION EQUIPMENT FOR COLD STORAGE 07/06 |
|------------------------------|----------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 37 00 | Refrigerant Condensing Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | refrigeration equipment for cold storage |
| Components | UFGS 2.2/2.3/2.4 | n/a | air-cooled condensers – water-cooled condensers – atmospheric cooling equipment – controls – heat recovery – water treatment |

| UFGS Section and Date | UFGS MAY 2012 | 23 70 01.00 10 | CENTRAL STEAM-GENERATING SYSTEM, COAL-FIRED 01/08 |
|------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |

| Attribute | Source | Unit | Value |
|--------------------|------------------|------|---|
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | coal-fired central steam-generating system |
| Components | UFGS 2.2/2.3/2.4 | n/a | boilers – stokers – combustion control – breeching – stacks – pumps – chemical treatment – coal handling – ash handling |

| UFGS Section and Date | UFGS MAY 2012 | 23 70 02.00 10 | CENTRAL STEAM GENERATING SYSTEM - COMBINATION GAS AND OIL FIRED 01/08 |
|------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance - cleaner fuels – lower air emissions –heat recovery |
| System Description | UFGS 1.3 | n/a | steam generation plant |
| Components | UFGS 2.3/2.4/2.5 | n/a | boiler – fuel burning equipment – controls – field devices – feedwater – condensate return – heat recovery – chemical feed |

| UFGS Section and Date | UFGS MAY 2012 | 23 70 03.00 10 | HEATING AND UTILITIES SYSTEMS, CENTRAL STEAM 01/08 |
|--------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 11 00 | Commercial Boilers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|---------|---|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Input Power | COBie Guide | kW | insert value |
| Output Power | COBie Guide | kW | insert value |
| Water Flow | COBie Guide | cu.m/hr | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Vent Diameter | COBie Guide | mm | insert value |
| Passes | COBie Guide | n/a | insert value |
| Pressure Drop | COBie Guide | kPa | insert value |
| Energy Source | COBie Guide | n/a | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Output Media | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | central steam heating system |
| Components | UFGS 2.2/2.3/2.4 | n/a | condensate pumping unit – controls – tanks - traps – radiators – convectors – unit heaters - piping |

| | | | |
|------------------------------|------------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 71 19 | THERMAL ENERGY STORAGE SYSTEM: ICE-ON-COIL 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 00 00 | HVAC Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | ice-on-coil type thermal energy storage system |
| Components | UFGS 2.2/2.3/2.4 | n/a | refrigeration system – controls – ice storage - piping |

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|--------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 72 00.00 10 | ENERGY RECOVERY SYSTEMS 01/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 55 00 | Energy HVAC Recovery Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|-------|--|
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | energy recovery systems for power plant installations |
| Components | UFGS 2.2/2.3/2.4 | n/a | heat recovery equipment – water treatment equipment |

| UFGS Section and Date | UFGS MAY 2012 | 23 72 26.00 10 | DESICCANT COOLING SYSTEMS 04/08 |
|------------------------------|------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 39 00 | Air Conditioning Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | desiccant cooling systems |
| Desiccant System | UFGS 2.3 | n/a | solid desiccant system – liquid Desiccant system |
| Components | UFGS 2.4/2.5/2.6 | n/a | heat exchangers – conditioner units – pump assemblies |

| UFGS Section and Date | UFGS MAY 2012 | 23 73 13.00 40 | MODULAR INDOOR CENTRAL-STATION AIR-HANDLING UNITS 02/11 |
|------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 39 00 | Air Conditioning Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Fan Flow - Maximum | COBie Guide | L/s | insert value |
| Fan Flow - Nominal | COBie Guide | L/s | insert value |
| Fan Outside Flow | COBie Guide | L/s | insert value |
| Fan Ext Pressure Drop | COBie Guide | kPa | insert value |

| Attribute | Source | Unit | Value |
|--------------------------|--------------|-------|--|
| Fan Motor Power | COBie Guide | kW | insert value |
| Fan Speed | COBie Guide | RPM | insert value |
| Fan Sound Level | COBie Guide | dB | insert value |
| Coil Flow | COBie Guide | L/s | insert value |
| Coil Velocity | COBie Guide | m/min | insert value |
| Coil Capacity | COBie Guide | W | insert value |
| Entering Air Temp DB | COBie Guide | C | insert value |
| Entering Air Temp WB | COBie Guide | C | insert value |
| Leaving Air Temp DB | COBie Guide | C | insert value |
| Leaving Air Temp WB | COBie Guide | C | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Chilled Water Rate | COBie Guide | L/s | insert value |
| Runout Inlet Size | COBie Guide | mm | insert value |
| Runout Outlet Size | COBie Guide | mm | insert value |
| Coil Air Pressure Drop | COBie Guide | Pa | insert value |
| Coil Water Pressure Drop | COBie Guide | kPa | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | central-station air-handling units |
| Air Handling Unit Type | UFGS 2.3 | n/a | low-pressure class A, medium pressure class B – high-pressure class C |
| Components | UFGS 2.3/2.4 | n/a | air handling unit – unit cabinet – fan – drain pans – insulation – coils – eliminators - filters |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 74 33.00 40 | PACKAGED, OUTDOOR, HEATING AND COOLING MAKEUP AIR-CONDITIONERS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 39 17 | Packaged Air Conditioners |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | packaged air-conditioning units |
| Air-Conditioner Type | UFGS 2.1 | n/a | window-type – console-type – remote-split-type |
| Components | UFGS 2.1/2.2 | n/a | self-contained packaged air-conditioners – vibration isolators |

| | | | |
|--------------------------|---------------|----------------|-----------------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 23 76 00.00 10 | EVAPORATIVE COOLING SYSTEMS 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 39 00 | Air Conditioning Equipment |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|--|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | evaporative cooling systems |
| Evaporative Cooler Type | UFGS 2.6 | n/a | direct - indirect - indirect/direct - multi-stage |
| Components | UFGS 2.6/2.7/2.8 | n/a | evaporative coolers - air waters - water tanks - cabinets - controls |
| UFGS Section and Date | UFGS MAY 2012 | 23 76 00.00 20 | EVAPORATIVE COOLING SYSTEM 07/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 39 00 | Air Conditioning Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.7 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | evaporative coolers and roof curbs |
| Evaporative Cooler Type | UFGS 2.2 | n/a | single-stage drip-type - single-stage rotary-type - single-stage washer type - two-stage (compound) type |
| Components | UFGS 2.3/2.4/2.5 | n/a | plenums - screens - roof curbs - vibration isolators |
| UFGS Section and Date | UFGS MAY 2012 | 23 81 00.00 20 | UNITARY AIR CONDITIONING EQUIPMENT 11/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 39 00 | Air Conditioning Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|-------|--|
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.7 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | room air conditioners |
| Unitary Air Conditioner Type | UFGS 2.1/2.2/2.3 | n/a | room air conditioners – packaged terminal units – heat pumps – single package air conditioners – split system air conditioners |
| Components | UFGS 2.1/2.2/2.3 | n/a | air conditioners – filters – motors and starters – refrigerant piping |

| UFGS Section and Date | UFGS MAY 2012 | 23 81 23.00 20 | COMPUTER ROOM AIR CONDITIONING UNITS 02/10 |
|------------------------------|----------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 39 00 | Air Conditioning Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | HVAC equipment for computer room air conditioning units |
| Components | UFGS 2.1/2.2/2.3 | n/a | cabinets – refrigeration system – condenser – controls – piping - ductwork |

| UFGS Section and Date | UFGS MAY 2012 | 23 81 47 | WATER-LOOP AND GROUND-LOOP HEAT PUMP SYSTEMS 08/08 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 17 00 | Heat Pumps |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | water source heat pump and ground source closed-loop heat pump systems |
| Heat Pump Type | UFGS 2.1 | n/a | water-source water-to-air – water-source water-to-water – ground source closed-loop |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| Components | UFGS 2.3/2.4/2.5 | n/a | aboveground piping systems – ground heat exchanger piping systems – piping accessories - controls |
| UFGS Section and Date | UFGS MAY 2012 | 23 82 00.00 20 | TERMINAL HEATING AND COOLING UNITS 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | unit heaters and infrared heaters |
| Unit Heater Type | UFGS 2.1 | n/a | gas-fired – oil-fired – steam – hot water – electric – unvented gas infrared – vented gas infrared – electric infrared |
| Components | UFGS 2.1/2.2/2.3 | n/a | heaters – fans – piping systems |
| UFGS Section and Date | UFGS MAY 2012 | 23 82 01.00 10 | WARM AIR HEATING SYSTEMS 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | warm air heating systems |
| Furnace Type | UFGS 2.2 | n/a | gas-fired – oil-fired |
| Components | UFGS 2.2/2.3/2.4 | n/a | furnace – air conditioning equipment – controls – dampers – humidifiers – filters - ductwork |
| UFGS Section and Date | UFGS MAY 2012 | 23 82 02.00 10 | UNITARY HEATING AND COOLING EQUIPMENT 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------------|------------------|----------------|--|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | unitary packaged and split system air-conditioners and heat pumps |
| Heating and Cooling Equipment Type | UFGS 2.2/2.3 | n/a | unitary room units – unitary packaged system – unitary split system |
| Components | UFGS 2.5/2.6/2.7 | n/a | air conditioners – heat pumps - humidifiers – heat recovery devices |
| UFGS Section and Date | UFGS MAY 2012 | 23 82 16.00 40 | AIR COILS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | air coils |
| Components | UFGS 2.2 | n/a | steam heating coils – hot-water heating coils – chilled-water cooling coils – volatile refrigerant cooling coils |
| UFGS Section and Date | UFGS MAY 2012 | 23 82 19.00 40 | FAN COIL UNITS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 33 00 | HVAC Fan Coil Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Air Flow | COBie Guide | L/s | insert value |

| Attribute | Source | Unit | Value |
|----------------------|------------------|------|--|
| Fan Speed | COBie Guide | n/a | insert value |
| Exit Static Pressure | COBie Guide | Pa | insert value |
| Entering Air Temp DB | COBie Guide | C | insert value |
| Entering Air Temp WB | COBie Guide | C | insert value |
| Leaving Air Temp DB | COBie Guide | C | insert value |
| Leaving Air Temp WB | COBie Guide | C | insert value |
| Total Capacity | COBie Guide | kW | insert value |
| Sensible Capacity | COBie Guide | kW | insert value |
| Entering Water Temp | COBie Guide | C | insert value |
| Leaving Water Temp | COBie Guide | C | insert value |
| Chilled Water Flow | COBie Guide | L/s | insert value |
| Cooling Coil Delta P | COBie Guide | kPa | insert value |
| Cooling Rows | COBie Guide | n/a | insert value |
| Fan Motor Power | COBie Guide | kW | insert value |
| Phase | COBie Guide | n/a | insert value |
| Cabinet Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | fan coil units for temperature-control assemblies |
| Components | UFGS 2.2/2.3/2.4 | n/a | enclosure – casing – fan – coils – drain pans – filters – motors – controls - insulation |

| UFGS Section and Date | UFGS MAY 2012 | 23 82 23.00 40 | UNIT VENTILATORS 02/11 |
|---------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | unit heaters and ventilators |
| Unit Heater and Ventilator Type | UFGS 2.1 | n/a | gas unit heaters – hot water propeller unit heaters – steam propeller unit heaters - cabinet unit heaters – unit ventilators |
| Components | UFGS 2.1 | n/a | heating element – filters – dampers – enclosures – insulation - controls |

| UFGS Section and Date | UFGS MAY 2012 | 23 82 43.00 40 | ELECTRIC DUCT HEATERS 08/11 |
|--------------------------|---------------|----------------|-----------------------------|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | electric duct heaters |
| Components | UFGS 2.2 | n/a | heating elements – enclosures - controls |

| | | | |
|------------------------------|------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 82 46.00 40 | ELECTRIC UNIT HEATERS 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | electric unit heaters |
| Components | UFGS 2.3/2.4/2.5 | n/a | heating elements – controls – propellers - motors |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 23 83 00.00 20 | ELECTRIC SPACE HEATING EQUIPMENT 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 15 00 | HVAC Heating Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | electric space heating equipment |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| Space Heater Type | UFGS 2.1/2.2/2.3 | n/a | electric unit heater – electric cabinet heater – electric baseboard unit – electric sill unit – electric pedestal unit |
| Components | UFGS 2.3/2.4/2.5 | n/a | heaters – thermostat – contactors - disconnects |
| UFGS Section and Date | UFGS MAY 2012 | 23 84 16.00 20 | DESICCANT DEHUMIDIFICATION EQUIPMENT 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-33 27 13 | Dehumidifiers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | rotary wheel type dehumidifiers |
| Humidifier Type | UFGS 2.1 | n/a | natural gas fired rotary wheel dehumidifier – waste heat fired rotary wheel dehumidifier |
| Components | UFGS 2.1 | n/a | air handling components – hot water heater – heat recovery device – evaporative chiller |
| UFGS Section and Date | UFGS MAY 2012 | 25 08 10 | UTILITY MONITORING AND CONTROL SYSTEM TESTING 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 15 00 | Building Automation and Control |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | factory, performance verification, endurance test procedures for utility monitoring and control systems and building level DDC |
| UFGS Section and Date | UFGS MAY 2012 | 25 10 10 | LONWORKS UTILITY MONITORING AND CONTROL SYSTEM (UMCS) 05/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 15 00 | Building Automation and Control |
| Name | COBie Guide | n/a | Type XX Space#-01 |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|--|
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | supervisory control and monitoring of network for utility monitoring and control systems |

| UFGS Section and Date | UFGS MAY 2012 | 26 00 00.00 20 | BASIC ELECTRICAL MATERIALS AND METHODS 07/06 |
|--------------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | electrical general requirements |
| Primary Electrical Characteristics | UFGS 1.4 | n/a | kV primary - single phase - three phase - two wire - three wire - four wire - 60 Hz - 50 Hz |
| Secondary Electrical Characteristics | UFGS 1.4 | n/a | volts secondary - single phase - three phase - three wire - four wire |

| UFGS Section and Date | UFGS MAY 2012 | 26 05 00.00 40 | COMMON WORK RESULTS FOR ELECTRICAL 11/10 |
|------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | requirements common to electrical sections |
| Electrical Components | UFGS 2.1/2.2/2.3 | n/a | conduit – wire and cable –connectors – switches – receptacles – outlets – panelboards – breakers – lamps – fixtures - transformers |
| UFGS Section and Date | UFGS MAY 2012 | 26 05 13.00 40 | MEDIUM-VOLTAGE CABLES 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | medium-voltage cables |
| Cable Types | UFGS 2.4 | n/a | multiple-conductor shielded – multiple-conductor nonshielded – single-conductor shielded – single-conductor nonshielded - portable |
| UFGS Section and Date | UFGS MAY 2012 | 26 05 19.00 10 | INSULATED WIRE AND CABLE 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | insulated wire and cable for use on hydraulic structures |
| Materials | UFGS 2.1 | n/a | conductors – insulation – jackets – metal clad cable - identification |
| UFGS Section and Date | UFGS MAY 2012 | 26 05 33 | DOCKSIDE POWER CONNECTION STATIONS 01/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|--------------|-------|--|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | dockside power connections for ship service and industrial service |
| Power Connection Stations | UFGS 2.1/2.2 | Volts | 600 V – 15 KV |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 05 48.00 10 | SEISMIC PROTECTION FOR ELECTRICAL EQUIPMENT 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-19 29 19 11 | Sound, Vibration and Seismic Control Products |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | seismic protection of electrical equipment, conduit and exterior utilities |
| Components | UFGS 2.1/2.2 | n/a | lighting fixture supports –sway bracing materials |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 05 70.00 40 | HIGH VOLTAGE OVERCURRENT PROTECTIVE DEVICES 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 25 17 | Electrical Power Protection Modules |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | high-voltage overcurrent protective devices |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| Components | UFGS 2.1/2.2/2.3 | n/a | motor controllers – transformers – enclosures – circuit breakers – fuses – protective relays – indicating instruments |
| UFGS Section and Date | UFGS MAY 2012 | 26 05 71.00 40 | LOW VOLTAGE OVERCURRENT PROTECTIVE DEVICES 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 25 17 | Electrical Power Protection Modules |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | low-voltage overcurrent protective devices |
| Components | UFGS 2.1/2.2/2.3 | n/a | motor controllers – transformers – enclosures – circuit breakers – fuses – control devices - protective relays – indicating instruments |
| UFGS Section and Date | UFGS MAY 2012 | 26 08 00 | APPARATUS INSPECTION AND TESTING 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 25 17 | Electrical Power Protection Modules |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | electrical inspection and testing |
| UFGS Section and Date | UFGS MAY 2012 | 26 09 13 | POWER MONITORING SYSTEM 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 25 17 | Electrical Power Protection Modules |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |

| Attribute | Source | Unit | Value |
|--------------------|------------------|-------|---|
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | power monitoring systems |
| Components | UFGS 2.1/2.2/2.3 | n/a | intelligent electronic devices – instrument transformers – workstation equipment - software |

| UFGS Section and Date | UFGS MAY 2012 | 26 09 23.00 40 | LIGHTING CONTROL DEVICES 08/10 |
|------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 00 | Electrical Lighting |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | lighting control devices |
| Components | UFGS 2.1/2.2/2.3 | n/a | photoconductive control devices – switches – ballast controls – light sensors – occupancy sensors |

| UFGS Section and Date | UFGS MAY 2012 | 26 11 13.00 20 | PRIMARY UNIT SUBSTATION 04/07 |
|-----------------------------------|---------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Horizontal Bus Current | COBie Guide | Amps | insert value |
| Vertical Bus Current | COBie Guide | Amps | insert value |
| Short Circuit Interrupting Rating | COBie Guide | KAIC | insert value |
| Enclosure Rating | COBie Guide | n/a | insert value |

| Attribute | Source | Unit | Value |
|---------------------|--------------|------|--|
| Minimum Bus Bracing | COBie Guide | KAIC | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | primary substations and associated load break switches and switchgear |
| Components | UFGS 2.1/2.2 | n/a | incoming sections – transition sections – transformer sections – switchgear section – protective devices – batteries and charger |

| UFGS Section and Date | UFGS MAY 2012 | 26 11 14.00 10 | MAIN ELECTRIC SUPPLY STATION AND SUBSTATION 10/07 |
|-----------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Horizontal Bus Current | COBie Guide | Amps | insert value |
| Vertical Bus Current | COBie Guide | Amps | insert value |
| Short Circuit Interrupting Rating | COBie Guide | KAIC | insert value |
| Enclosure Rating | COBie Guide | n/a | insert value |
| Minimum Bus Bracing | COBie Guide | KAIC | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | main electric supply stations or substations |
| Components | UFGS 2.1/2.2/2.3 | n/a | incoming switching/circuit interrupting equipment – outgoing metal-clad switchgear - instrument transformers – substation equipment |

| UFGS Section and Date | UFGS MAY 2012 | 26 11 16 | SECONDARY UNIT SUBSTATIONS 02/10 |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|--------------------|------------------|------|--|
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | three phase secondary unit substations |
| Components | UFGS 2.1/2.2/2.3 | n/a | incoming stations – transformer sections – outgoing section – meters – instruments - transformer |

| | | | |
|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 26 12 19.00 40 | PAD-MOUNTED, LIQUID-FILLED, MEDIUM-VOLTAGE TRANSFORMERS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 13 00 | Transformers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | three-phase pad-mounted transformers for exterior applications |
| Components | UFGS 2.1/2.2 | n/a | high voltage dead-front type – high voltage live-front type – low voltage compartment – transformer – insulating liquid |

| | | | |
|------------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 26 12 19.10 | THREE-PHASE PAD-MOUNTED TRANSFORMERS 02/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 13 00 | Transformers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | three-phase pad-mounted transformers for exterior applications |
| Components | UFGS 2.1/2.2 | n/a | high voltage dead-front type – high voltage live-front type – low voltage compartment – transformer – insulating liquid |

| | | | |
|--------------------------|---------------|-------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 26 12 19.20 | SINGLE-PHASE PAD-MOUNTED TRANSFORMERS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 13 00 | Transformers |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|-------|--|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | single-phase pad-mounted transformers |
| Compartment Construction | UFGS 2.2.1 | n/a | single – two compartment |
| Components | UFGS 2.2/2.3/2.4 | n/a | dead-front type - high voltage compartment – low voltage compartment 0 insulating liquid |

| | | | |
|-----------------------------------|------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 13 00.00 20 | SF6/HIGH-FIREPOINT FLUIDS INSULATED PAD-MOUNTED SWITCHGEAR 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 31 31 | Switchgear |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Horizontal Bus Current | COBie Guide | Amps | insert value |
| Vertical Bus Current | COBie Guide | Amps | insert value |
| Short Circuit Interrupting Rating | COBie Guide | KAIC | insert value |
| Enclosure Rating | COBie Guide | n/a | insert value |
| Minimum Bus Bracing | COBie Guide | KAIC | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | SF6 or high-firepoint biodegradable fluid insulated pad-mounted switchgear |
| Rating | UFGS 2.1.1 | kV | 15.5 kV – 27 kV – 38 kV |
| Components | UFGS 2.1/2.2/2.3 | n/a | switchgear – high-voltage connectors – surge arresters – refill cylinders |

| | | | |
|--------------------------|---------------|----------------|--------------------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 26 18 23.00 40 | MEDIUM-VOLTAGE SURGE ARRESTERS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 17 | Surge Protection Devices |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|--|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | medium-voltage surge and lighting arrestors |
| Components | UFGS 3.2 | n/a | distribution type arresters – intermediate type arresters – station type arresters |

| | | | |
|----------------------------------|---------------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 20 00 | INTERIOR DISTRIBUTION SYSTEM 08/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | electrical wiring systems |
| Conduit and Fittings | UFGS 2.2 | n/a | rigid metallic – rigid nonmetallic – intermediate metal – zinc-coated electrical metallic tubing – plastic – coated rigid steel – flexible |
| Surface Raceways | UFGS 2.3 | n/a | metal – nonmetallic |
| Busways | UFGS 2.4 | n/a | feeder – plug in |
| Cable Trays | UFGS 2.5 | n/a | basket-type – trough-type – ladder-type – solid-bottom type – cantilever |
| Telecommunications Cable Support | UFGS 2.6 | n/a | open top – closed ring |
| General Components | UFGS 2.7/2.8/2.9 | n/a | boxes – wires and cables – device plates – switches – fuses – receptacles – panelboards – load centers – breakers – transformers |
| Motor Components | UFGS 2.21/2.22/2.23 | n/a | single-phase motors – polyphase motors – motor controllers – manual motor starters – motor control centers |

| | | | |
|-----------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 22 00.00 10 | 480-VOLT STATION SERVICE SWITCHGEAR AND TRANSFORMERS 10/07 |
|-----------------------|---------------|----------------|--|

| Attribute | Source | Unit | Value |
|-----------------------------------|------------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 31 00 | Electrical Power Distribution Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Horizontal Bus Current | COBie Guide | Amps | insert value |
| Vertical Bus Current | COBie Guide | Amps | insert value |
| Short Circuit Interrupting Rating | COBie Guide | KAIC | insert value |
| Enclosure Rating | COBie Guide | n/a | insert value |
| Minimum Bus Bracing | COBie Guide | KAIC | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | 480-volt station service switchgear and transformers |
| Components | UFGS 2.5/2.6/2.7 | n/a | service switchgear - metal-enclosed bus - secondary unit substation - station service transformers |

| UFGS Section and Date | UFGS MAY 2012 | 26 23 00.00 40 | SWITCHBOARDS AND SWITCHGEAR 02/11 |
|-----------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 31 00 | Electrical Power Distribution Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Horizontal Bus Current | COBie Guide | Amps | insert value |
| Vertical Bus Current | COBie Guide | Amps | insert value |
| Short Circuit Interrupting Rating | COBie Guide | KAIC | insert value |
| Enclosure Rating | COBie Guide | n/a | insert value |
| Minimum Bus Bracing | COBie Guide | KAIC | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | deadfront switchboard assemblies |

| Attribute | Source | Unit | Value |
|-----------------------------------|---------------|----------------|---|
| Components | UFGS 2.2 | n/a | enclosure – sections – protective devices – breakers – trip units – instruments – meters – current transformers |
| UFGS Section and Date | UFGS MAY 2012 | 26 23 00 | SWITCHBOARDS AND SWITCHGEAR 07/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 31 00 | Electrical Power Distribution Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Horizontal Bus Current | COBie Guide | Amps | insert value |
| Vertical Bus Current | COBie Guide | Amps | insert value |
| Short Circuit Interrupting Rating | COBie Guide | KAIC | insert value |
| Enclosure Rating | COBie Guide | n/a | insert value |
| Minimum Bus Bracing | COBie Guide | KAIC | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | deadfront switchboard assemblies |
| Components | UFGS 2.2 | n/a | enclosure – sections – protective devices – breakers – trip units – instruments – meters – current transformers |
| UFGS Section and Date | UFGS MAY 2012 | 26 24 16.00 40 | PANELBOARDS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 31 13 | Distribution Panel Boards |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Phase | COBie Guide | n/a | insert value |
| Number of Wires | COBie Guide | n/a | insert value |
| Number of Poles | COBie Guide | n/a | insert value |
| Main Breaker Mounting | COBie Guide | n/a | insert value |
| Main Bus Current | COBie Guide | Amps | insert value |
| Neutral Bus | COBie Guide | n/a | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| Equip Ground Bus | COBie Guide | n/a | insert value |
| Isolated Ground Bus | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| AIC Rating | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | power-distribution panelboards and lighting and appliance branch-circuit panelboards |
| Components | UFGS 2.3/2.3/2.4 | n/a | panelboards – filtered panelboards – circuit breakers |
| UFGS Section and Date | UFGS MAY 2012 | 26 24 19.00 40 | MOTOR CONTROL CENTERS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 31 23 | Motor Control Centers |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | motor control centers and switchboards |
| Components | UFGS 2.2/2.3/2.4 | n/a | circuit breakers – wiring – terminal blocks – space heaters – motor control centers - |
| UFGS Section and Date | UFGS MAY 2012 | 26 27 13.10 30 | ELECTRIC METERS 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 25 11 | Electrical Meters |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | poly-phase electricity meters |
| Components | UFGS 2.1/2.2 | n/a | socket-mount power meters – panel-mounted power meters |
| UFGS Section and Date | UFGS MAY 2012 | 26 27 14.00 20 | ELECTRICITY METERING 02/11 |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 25 11 | Electrical Meters |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.7 | n/a | electricity meters |
| Components | UFGS 2.2/2.2 | n/a | electricity meters – transformers - communications interfaces |
| UFGS Section and Date | UFGS MAY 2012 | 26 27 29 | MARINA ELECTRICAL WORK 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 00 00 | Electrical and Lighting Specific Products and Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | electrical wiring systems |
| Components | UFGS 2.2/2.3/2.4 | n/a | conduit and fittings – power center – boxes – wire and cables – receptacles – panelboards – transformers - telephone |
| UFGS Section and Date | UFGS MAY 2012 | 26 28 00.00 10 | MOTOR CONTROL CENTERS, SWITCHBOARDS AND PANELBOARDS 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 31 00 | Electrical Power Distribution Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| Frequency | COBie Guide | Hz | insert value |
| Phase | COBie Guide | n/a | insert value |
| Number of Wires | COBie Guide | n/a | insert value |
| Number of Poles | COBie Guide | n/a | insert value |
| Main Breaker Mounting | COBie Guide | n/a | insert value |
| Main Bus Current | COBie Guide | Amps | insert value |
| Neutral Bus | COBie Guide | n/a | insert value |
| Equip Ground Bus | COBie Guide | n/a | insert value |
| Isolated Ground Bus | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| AIC Rating | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | motor control centers, switchboards and panelboards |
| Components | UFGS 2.2/2.3/2.4 | n/a | motor control centers – dead-front switchboards - panelboards |
| UFGS Section and Date | UFGS MAY 2012 | 26 28 01.00 10 | COORDINATED POWER SYSTEM PROTECTION 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 25 17 | Electrical Power Protection Modules |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | coordinated protection of power systems |
| Components | UFGS 2.4/2.5/2.6 | n/a | motor control and motor control centers – fuses – circuit breakers – relays - transformers |
| UFGS Section and Date | UFGS MAY 2012 | 26 28 21.00 40 | AUTOMATIC TRANSFER SWITCHES 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 37 11 | Automatic Transfer Switches |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|--------------------|-------------|------|--|
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | automatic transfer switches for use with engine-generator sets for standby power |
| Components | UFGS 2.3 | n/a | contacts – indicating lights – terminal boards |

| UFGS Section and Date | UFGS MAY 2012 | 26 29 01.00 10 | ELECTRIC MOTORS, 3-PHASE VERTICAL INDUCTION TYPE 11/08 |
|------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 15 00 | Electric Motors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Power | COBie Guide | kW | insert value |
| Phase | COBie Guide | n/a | insert value |
| Efficiency | COBie Guide | n/a | insert value |
| Drive | COBie Guide | n/a | insert value |
| Drive Control Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | three-phase vertical induction motors for storm-water pumps in pumping stations |
| Components | UFGS 2.2/2.3/2.4 | n/a | motors – surge protection – motor terminals and boxes |

| UFGS Section and Date | UFGS MAY 2012 | 26 29 02.00 10 | ELECTRIC MOTORS, 3-PHASE VERTICAL SYNCHRONOUS TYPE 11/08 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 15 00 | Electric Motors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Power | COBie Guide | kW | insert value |
| Phase | COBie Guide | n/a | insert value |
| Efficiency | COBie Guide | n/a | insert value |
| Drive | COBie Guide | n/a | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| Drive Control Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | three-phase vertical synchronous motors for storm-water pumps in pumping stations |
| Components | UFGS 2.3/2.4/2.5 | n/a | motors – instruments and gauges – piping – space heaters – current transformers |
| UFGS Section and Date | UFGS MAY 2012 | 26 29 23 | VARIABLE FREQUENCY DRIVE SYSTEMS UNDER 600 VOLTS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 17 00 | Variable Speed Drives |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | variable frequency drives |
| Components | UFGS 2.1/2.2 | n/a | variable frequency drives - enclosures |
| UFGS Section and Date | UFGS MAY 2012 | 26 32 13.00 20 | SINGLE OPERATION GENERATOR SETS 04/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 11 00 | Electrical Generators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Maximum Power Output | COBie Guide | kW | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | diesel engine-generator sets |
| Components | UFGS 2.1/2.2 | n/a | diesel engine-generator system – engine-generator auxiliary systems and equipment |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 32 14.00 10 | DIESEL-GENERATOR SET, STATIONARY 15-300 KW, STANDBY APPLICATIONS 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 11 00 | Electrical Generators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Maximum Power Output | COBie Guide | kW | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | stationary diesel driven generator sets |
| Components | UFGS 2.4/2.5/2.6 | n/a | engine – fuel system – cooling system – air intake equipment – exhaust system – starting system – generator - controls |
| UFGS Section and Date | UFGS MAY 2012 | 26 32 15.00 10 | DIESEL-GENERATOR SET STATIONARY 100-2500 KW, WITH AUXILIARIES 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 11 00 | Electrical Generators |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Maximum Power Output | COBie Guide | kW | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | stationary diesel-driven generator sets |
| Components | UFGS 2.4/2.5/2.6 | n/a | engine – fuel system – cooling system – air intake equipment – exhaust system – starting system – generator - controls |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 32 26 | MOTOR-GENERATOR SETS, 400 HERTZ (HZ) 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 11 13 | Motor Generator Sets |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Operating Weight | COBie Guide | Kg | insert value |
| Type of Support | COBie Guide | n/a | insert value |
| Maximum Power Output | COBie Guide | kW | insert value |
| Fuel Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | motor generator sets |
| Components | UFGS 2.2 | n/a | motor-generator set – control devices |
| UFGS Section and Date | UFGS MAY 2012 | 26 32 33.00 10 | UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEM ABOVE 15 KVA CAPACITY 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 23 21 | Uninterrupted Power Supply (UPS) Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | static uninterruptible power supply |
| Components | UFGS 2.5/2.6/2.7 | n/a | UPS module – static bypass transfer circuit – maintenance bypass switch – control panel – battery system |
| System Capacity | UFGS 2.2.1 | kVA (kW) | 10 kVa – 20 kVa – 40 kVa – 80 kVa – 150 kVa – 250 kVa – 500 kVa – 750 kVa |
| Battery Capacity | UFGS 2.2.2 | min | 5 – 10 – 12 – 15 - 30 |
| UFGS Section and Date | UFGS MAY 2012 | 26 33 53.00 20 | UNINTERRUPTIBLE POWER SUPPLY (UPS) 04/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 23 21 | Uninterrupted Power Supply (UPS) Units |
| Name | COBie Guide | n/a | Type XX Space#-01 |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------|--|
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | static uninterruptible power supply |
| Components | UFGS 2.1/2.2/2.3 | n/a | UPS module – static bypass transfer circuit – maintenance bypass switch – control panel – battery system |
| Module Capacity | UFGS 2.4.2 | kVA (kW) | 10 kVA – 20 kVA – 40 kVA – 80 kVA – 150 kVA – 250 kVA – 500 kVA – 750 kVA |
| Battery Capacity | UFGS 2.4.3 | min | 5 – 10 – 12 – 15 - 30 |

| | | | |
|------------------------------|------------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 26 35 33.00 40 | POWER FACTOR CORRECTION EQUIPMENT 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 23 19 | Powerfactor Correction Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | metal-enclosed shunt capacitor equipment |
| Components | UFGS 2.1/2.2/2.3 | n/a | shunt capacitor equipment – pole line capacitors – low-voltage capacitors |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 35 43 | 400-HERTZ (HZ) SOLID STATE FREQUENCY CONVERTER 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 23 00 | Power Conditioning Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|--|
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | solid state frequency converters |
| Components | UFGS 2.1/2.2/2.3 | n/a | frequency converter – aircraft power cable assembly – control panel |
| UFGS Section and Date | UFGS MAY 2012 | 26 35 46.00 20 | RADIO FREQUENCY INTERFERENCE POWER LINE FILTERS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 23 00 | Power Conditioning Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | radio frequency filters |
| Components | UFGS 2.3/2.4/2.5 | n/a | filter units – filter connections |
| UFGS Section and Date | UFGS MAY 2012 | 26 36 00.00 10 | AUTOMATIC TRANSFER SWITCH AND BY-PASS/ISOLATION SWITCH 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 37 11 | Automatic Transfer Switches |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | low-voltage applications of automatic transfer switches and switches with by-pass/isolation switches |
| Components | UFGS 2.3/2.4/2.5 | n/a | automatic transfer switches – by-pass/isolation switches |
| UFGS Section and Date | UFGS MAY 2012 | 26 36 23.00 20 | AUTOMATIC TRANSFER SWITCHES 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 37 11 | Automatic Transfer Switches |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|--|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | automatic transfer switches for use in emergency electrical power systems |
| Components | UFGS 2.1 | n/a | automatic transfer switches – by-pass/isolation switches – switch controls |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 41 00.00 20 | LIGHTNING PROTECTION SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 15 | Lightning Protection |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | lightning protection systems for non-ordinance naval facilities |
| System Components | UFGS 2.2 | n/a | air terminals – ground rods – grounding plates |

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|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 41 00.00 40 | LIGHTNING PROTECTION SYSTEM 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 15 | Lightning Protection |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|---|
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | lightning protection systems for non-ordnance naval facilities |
| System Components | UFGS 2.2 | n/a | air terminals – ground rods – grounding plates |
| UFGS Section and Date | UFGS MAY 2012 | 26 41 01.00 10 | LIGHTNING PROTECTION SYSTEM 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 15 | Lightning Protection |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | lightning protection for buildings and other structures |
| System Components | UFGS 2.2 | n/a | air terminals – ground rods – grounding plates |
| UFGS Section and Date | UFGS MAY 2012 | 26 42 13.00 20 | CATHODIC PROTECTION BY GALVANIC ANODES 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 00 | Electric Power Protection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | cathodic protection systems utilizing galvanic anodes for underground piping and buried or submerged structures |
| Anodes | UFGS 2.1 | n/a | magnesium – cast zinc – wrought zinc – aluminum |
| Reference Electrodes | UFGS 2.3 | n/a | copper copper-sulfate – silver silver-chloride - zinc |
| UFGS Section and Date | UFGS MAY 2012 | 26 42 14.00 10 | CATHODIC PROTECTION SYSTEM (SACRIFICIAL ANODE) 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 00 | Electric Power Protection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|---|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | cathodic protection system utilizing continuous flow direct current from sacrificial anodes |
| Anodes | UFGS 2.1 | n/a | high-potential magnesium - zinc |

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|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 42 15.00 10 | CATHODIC PROTECTION SYSTEM (STEEL WATER TANKS) 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 00 | Electric Power Protection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | cathodic protection system using impressed current anodes |
| System Type | UFGS 1.2 | n/a | automatic – manual |
| Anodes | UFGS 2.1 | n/a | high silicon cast iron – mixed metal oxide – precious metal |

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|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 42 17.00 10 | CATHODIC PROTECTION SYSTEM (IMPRESSED CURRENT) 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 00 | Electric Power Protection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |

| Attribute | Source | Unit | Value |
|--------------------|----------|------|---|
| System Description | UFGS 1.2 | n/a | cathodic protection system using impressed current anodes |
| Anodes | UFGS 2.1 | n/a | high silicon cast-iron – bare graphite – canister contained coke breeze - mixed metal oxide |

| UFGS Section and Date | UFGS MAY 2012 | 26 42 19.00 20 | CATHODIC PROTECTION BY IMPRESSED CURRENT 04/06 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 00 | Electric Power Protection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | cathodic protection systems using impressed current systems for underground piping and buried or submerged structure |
| Anodes | UFGS 2.1 | n/a | high-silicon chromium bearing cast iron – graphite – mixed metal oxide |

| UFGS Section and Date | UFGS MAY 2012 | 26 42 19.10 | CATHODIC PROTECTION SYSTEMS (IMPRESSED CURRENT) FOR LOCK MITER GATES 11/08 |
|------------------------------|---------------|-------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 00 | Electric Power Protection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | cathodic protection systems for lock miter gates |
| Anodes | UFGS 2.5 | n/a | hi-silicon cast-iron – ceramic coated titanium – hi-silicon cast-iron |

| UFGS Section and Date | UFGS MAY 2012 | 26 42 22.00 20 | CATHODIC PROTECTION SYSTEM FOR STEEL WATER TANKS 01/08 |
|--------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 00 | Electric Power Protection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|---|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | cathodic protection systems using impressed current systems and galvanic anodes for steel water tanks |
| Anodes | UFGS 2.1 | n/a | high-silicon chromium bearing cast iron – aluminum – precious metal - magnesium |

| | | | |
|------------------------------|--------------------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 26 51 00.00 40 | INTERIOR LIGHTING 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 | Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide/UFGS 2.5/2.6 | n/a | recess – flush -suspended |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide/UFGS 1.8 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | interior lighting |
| Lamp Type | UFGS 2.2/2.3/2.4 | n/a | fluorescent – high-intensity-discharge – incandescent |
| Ballasts | UFGS 2.2/2.3 | n/a | T-8 – F17T8 – T-5 – F96T8 – T-8 dimming – electromagnetic - high-pressure sodium – low-pressure sodium – metal-halide |

| | | | |
|--------------------------|---------------|-------------|-------------------------|
| UFGS Section and Date | UFGS MAY 2012 | 26 51 00 | INTERIOR LIGHTING 07/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 | Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |

| Attribute | Source | Unit | Value |
|------------------------------|--------------------------|----------------|---|
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide/UFGS 2.4/2.5 | n/a | recess – flush -suspended |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide/UFGS 1.9 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | interior lighting |
| Lighting Control | UFGS 1.4 | n/a | control modules – power packs – dimming ballasts – occupancy sensors – light level sensors |
| Lamp Type | UFGS 2.1/2.2/2.3 | n/a | fluorescent – high-intensity-discharge – incandescent |
| Ballasts | UFGS 2.1/2.2 | n/a | T-8 – F17T8 – T-5 – F96T8 – T-8 dimming – electromagnetic - high-pressure sodium – low-pressure sodium – metal-halide |
| UFGS Section and Date | UFGS MAY 2012 | 26 52 00.00 40 | EMERGENCY LIGHTING 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 13 | Emergency Lighting |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|---|
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | battery-operated incandescent and emergency lighting units and lamps |
| Fixture Type | UFGS 2.2 | n/a | emergency lighting egress units – emergency fluorescent – central emergency |
| UFGS Section and Date | UFGS MAY 2012 | 26 53 00.00 40 | EXIT SIGNS 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 15 | Exit Illuminated Signs |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | exist lighting fixtures and lamps |
| Fixture Type | UFGS 2.2/2.3/2.4/2.5 | n/a | contemporary – emergency power loss – light emitting diodes – self-luminous |
| UFGS Section and Date | UFGS MAY 2012 | 26 54 21.00 10 | HELIPAD LIGHTING AND VISUAL NAVIGATION AIDS 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 21 | Specialized Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|---|
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | lighting and visual navigation aids for helipads |
| Lighting and Navigation Aids | UFGS 2.3/2.4/2.5/2.6 | n/a | lighting - markings – beacons – wind direction indicator – obstruction lights – glide slope indicator – hoverlane |
| UFGS Section and Date | UFGS MAY 2012 | 26 55 53.00 10 | EXTERIOR LIGHTING INCLUDING SECURITY AND CCTV APPLICATIONS 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 | Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | lighting for roads, walks, security and closed circuit television assessment |
| Poles | UFGS 2.12 | n/a | aluminum – steel – concrete – wood – fiberglass |
| Lamp Type | UFGS 2.17/2.18/2.19 | n/a | high-pressure sodium – mercury vapor – metal-halide – incandescent - fluorescent |
| UFGS Section and Date | UFGS MAY 2012 | 26 55 53.00 40 | SECURITY LIGHTING 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 20 | Security Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |

| Attribute | Source | Unit | Value |
|------------------------------|---------------------|-------|--|
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | lighting for security and closed circuit television area illumination |
| Lamp Type | UFGS 2.10/2.11/2.12 | n/a | high-pressure sodium – mercury vapor – metal-halide – incandescent - fluorescent |

| UFGS Section and Date | UFGS MAY 2012 | 26 55 80.00 20 | SURGICAL LIGHTING FIXTURES 04/06 |
|------------------------------|---------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-25 59 13 17 | Surgical Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|----------------|---|
| System Description | UFGS 2.1 | n/a | surgical lighting fixtures |
| Fixture Type | UFGS 2.1 | n/a | one lighthouse - two lighthouse - track-mounted |
| Lamp Type | UFGS 2.1.6 | n/a | quartz halogen |
| UFGS Section and Date | UFGS MAY 2012 | 26 56 00.00 20 | EXTERIOR LIGHTING 08/12 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 | Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide/UFGS 1.7 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | exterior lighting systems |
| Luminaires | UFGS 2.2 | n/a | HID - LPS - fluorescent - induction - LED |
| Luminaire Light Source | UFGS 2.2.2 | n/a | high pressure sodium - metal halide - low pressure sodium - fluorescent - induction - LED |
| Luminaire Controls | UFGS 2.4 | n/a | photocell - time switch - lighting contactor - motion sensor - bi-level HID controller |
| Poles | UFGS 2.5 | n/a | concrete - aluminum - steel - wood - fiberglass |
| UFGS Section and Date | UFGS MAY 2012 | 26 56 00 | EXTERIOR LIGHTING 07/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 | Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|--------------------|----------------------|------|--|
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | exterior lighting systems |
| Lamps | UFGS 2.2 | n/a | high-pressure sodium – standby high-pressure sodium – low-pressure sodium – metal-halide |
| Poles | UFGS 2.6 | n/a | concrete – aluminum – steel – wood - fiberglass |

| | | | |
|------------------------------|----------------------|-------------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 56 13.00 40 | LIGHTING POLES AND STANDARDS 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 21 13 | Lighting Poles |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | lighting poles and standards for exterior lighting |
| Poles | UFGS 2.3 | n/a | concrete – aluminum – steel – wood – fiberglass |
| Pole Windload Design | UFGS 2.3 | km/hr (mph) | 160 km/hr (100 mph) |

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|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 26 56 19.00 40 | ROADWAY LIGHTING 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 21 | Specialized Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|--------------------|----------------------|------|--|
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide/UFGS 2.2 | n/a | end-mounted – side-mounted |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | highway and roadway lighting luminaires |
| Lamps | UFGS 2.2.5 | n/a | high pressure sodium - low pressure sodium - incandescent |

| UFGS Section and Date | UFGS MAY 2012 | 26 56 20.00 10 | AIRFIELD AND HELIPORT LIGHTING AND VISUAL NAVIGATION AIDS 10/07 |
|------------------------------|------------------|----------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 21 | Specialized Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | lighting and visual navigation aids for airfields and heliports |
| Lighting and Navigation Aids | UFGS 2.4/2.5/2.6 | n/a | lighting - markings – beacons – wind direction indicator – obstruction lights – glide slope indicator – hoverlane |

| UFGS Section and Date | UFGS MAY 2012 | 26 56 23.00 40 | AREA LIGHTING 11/08 |
|--------------------------|---------------|----------------|-------------------------------|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 21 | Specialized Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------|----------------------|-------|--|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | area lighting for exterior installations and recreational areas |
| Lamps | UFGS 2.2 | n/a | high-pressure sodium – standby high-pressure sodium – lower-pressure sodium – metal-halide |

| UFGS Section and Date | UFGS MAY 2012 | 26 56 36.00 40 | FLOOD LIGHTING 11/08 |
|------------------------------|----------------------|----------------|--|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 47 11 21 | Specialized Lighting Fixtures |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Lens Type | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Mounting | COBie Guide | n/a | insert value |
| Lamp Type | COBie Guide | n/a | insert value |
| Lamp Count | COBie Guide | Each | insert value |
| Lamp Power | COBie Guide | W | insert value |
| Function | COBie Guide | n/a | insert value |
| Light Path | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide/UFGS 1.6 | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | floodlighting fixtures and energy efficient lamps |
| Luminaires | UFGS 2.4/2.5/2.6 | n/a | fluorescent - high-intensity discharge – quartz-iodine |

| Attribute | Source | Unit | Value |
|-----------|-----------|------|--|
| Lamps | UFGS 2.10 | n/a | low-pressure sodium – high-pressure sodium – metal halide - incandescent |

| | | | |
|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 26 60 13.00 40 | LOW-VOLTAGE MOTORS 11/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 15 00 | Electric Motors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Power | COBie Guide | kW | insert value |
| Phase | COBie Guide | n/a | insert value |
| Efficiency | COBie Guide | n/a | insert value |
| Drive | COBie Guide | n/a | insert value |
| Drive Control Type | COBie Guide | n/a | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | alternating-current motors |
| Motor Types | UFGS 2.1.1 | n/a | 250 watt rating 1/3 HP and smaller single phase –375 watt 1/2 HP and larger three-phase |

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|------------------------------|------------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 27 05 13.00 10 | TWO-WAY RADIO DATA ETHERNET TRANSMISSION SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 23 19 | Radio Broadcast Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | two-way radio system for wireless data transmission building-to-building for utility monitory and control system |
| Communication Equipment | UFGS 2.2.1/2.2.2 | n/a | government furnished - contractor furnished |

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|-----------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 27 05 14.00 10 | CABLE TELEVISION PREMISES DISTRIBUTION SYSTEM 04/06 |
|-----------------------|---------------|----------------|---|

| Attribute | Source | Unit | Value |
|------------------------------|---------------|-------------|---|
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 11 17 | Communication Wireways |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | coaxial cable TV premises distribution system |
| Cable | UFGS 2.1.1 | n/a | coaxial cable rated CMP – coaxial cable rated CMR – coaxial cable rated CMG |

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|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 27 05 28.36 40 | CABLE TRAYS FOR COMMUNICATIONS SYSTEMS 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 11 13 | Communication Cable Trays |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | ladder cable trays – trough cable trays – channel cable trays – solid bottom cable trays |
| Cable Tray Materials | UFGS 2.2 | n/a | aluminum – zinc-coated steel – hot-dip galvanized steel – stainless steel |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 27 05 29.00 10 | PROTECTIVE DISTRIBUTION SYSTEM (PDS) FOR SIPRNET COMMUNICATION SYSTEMS 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 11 17 | Communication Wireways |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | protective distribution system for SIPRNET communication systems |
| Carrier Configuration | UFGS 2.1.1/2.1.2 | n/a | secure raceway carrier – conduit carrier |
| UFGS Section and Date | UFGS MAY 2012 | 27 10 00 | BUILDING TELECOMMUNICATIONS CABLING SYSTEM 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 11 17 | Communication Wireways |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | permanently installed building telecommunications cabling and pathway systems |
| Backbone Cabling | UFGS 2.3.1 | n/a | copper – optical fiber |
| UFGS Section and Date | UFGS MAY 2012 | 27 13 23.00 40 | COMMUNICATIONS OPTICAL BACKBONE CABLING 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 11 17 | Communication Wireways |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | fiber optic backbone cabling |
| Fiber Optic Cabling | UFGS 2.1.1 | n/a | multi mode fiber media – single mode fiber media |
| UFGS Section and Date | UFGS MAY 2012 | 27 15 19.00 10 | WIRE LINE DATA TRANSMISSION SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 11 17 | Communication Wireways |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|---|
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | half or full duplex wire line data transmission system for communication between local devices and central processor |
| Wire Line Cabling | UFGS 2.2 | n/a | underground – aerial – direct burial - interior |
| UFGS Section and Date | UFGS MAY 2012 | 27 21 00.00 20 | INTERCOMMUNICATION SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 23 17 | Intercom Equipment |
| Name | COBie Guide | n/a | Type XX Space#01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | intercommunication system for speech |
| System Type | UFGS 2.1 | n/a | direct connected –single conversation path central control – multiple conversation path central control – paging – public address |
| UFGS Section and Date | UFGS MAY 2012 | 27 21 00.00 40 | INTERCOMMUNICATION SYSTEM 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 23 17 | Intercom Equipment |
| Name | COBie Guide | n/a | Type XX Space#01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|---|
| System Description | UFGS 1.3 | n/a | intercommunication system for speech |
| System Type | UFGS 2.1 | n/a | direct connected –single conversation path central control – multiple conversation path central control – paging – public address |
| UFGS Section and Date | UFGS MAY 2012 | 27 21 10.00 10 | FIBER OPTIC DATA TRANSMISSION SYSTEM 07/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 11 15 15 | Fiber Optic Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | fiber optic data transmission system |
| Modules | UFGS 2.1 | n/a | analog – digital – fiber optic |
| UFGS Section and Date | UFGS MAY 2012 | 27 21 10.00 40 | FIBER OPTIC DATA TRANSMISSION SYSTEM 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 11 15 15 | Fiber Optic Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | fiber optic data transmission system |
| Modules | UFGS 2.1 | n/a | analog – digital – fiber optic |
| UFGS Section and Date | UFGS MAY 2012 | 27 33 30.00 10 | STAND-ALONE ONE-WAY RADIO CONTROL SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 23 21 | Radio Communication Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |

| Attribute | Source | Unit | Value |
|-------------------------|------------------|-------|--|
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | one-way FM radio control system for equipment |
| Communication Equipment | UFGS 2.2.1/2.2.2 | n/a | government furnished - contractor furnished |

| | | | |
|------------------------------|------------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 27 33 31.00 10 | ONE-WAY FM RADIO DATA CONTROL SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 23 21 | Radio Communication Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | one-way FM radio control system for equipment with energy management software |
| Communication Equipment | UFGS 2.2.1/2.2.2 | n/a | government furnished - contractor furnished |

| | | | |
|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 27 41 00.00 10 | NURSE CALL AUDIO-VISUAL (NCAV) SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 27 17 13 | Nurse Call Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | nurse call audio-visual system |
| Subsystems | UFGS 2.2 | n/a | patient stations - staff stations - emergency stations - infant stations - code blue stations - outlet stations |
| Servers | UFGS 2.7 | n/a | call logging - information system - radio page - wireless telephone |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|---|
| UFGS Section and Date | UFGS MAY 2012 | 27 41 16.00 10 | TELEVISION SIGNAL RECEPTION SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 25 23 11 | Television Broadcasting Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | television reception system for radio frequency signals for transmission by coaxial cable distribution system |
| Antennas | UFGS 2.2 | n/a | off-air television antenna – off-air FM antenna – support tower – transmission lines |
| UFGS Section and Date | UFGS MAY 2012 | 27 51 13.00 10 | RADIO PAGING SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 17 15 | Public Address Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | radio paging system for signaling and message communications |
| Reception Equipment | UFGS 2.5 | n/a | paging terminals – encoder/CPU – couplers – transmitters - receivers |
| UFGS Section and Date | UFGS MAY 2012 | 27 51 16 | RADIO AND PUBLIC ADDRESS SYSTEMS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 17 15 | Public Address Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|---|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | audio distribution network for radio and public address system |
| System Type | UFGS 1.2 | n/a | multi-channel system with paging – single-channel system |
| System Equipment | UFGS 2.2 | n/a | amplifiers – microphones – loudspeakers – players |
| UFGS Section and Date | UFGS MAY 2012 | 27 51 23.10 | INTERCOMMUNICATION SYSTEM 05/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 27 15 | Intercoms |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | modular wired and wireless intercommunication system |
| System Type | UFGS 2.1 | n/a | direct connected –single conversation path central control – multiple conversation path central control |
| System Equipment | UFGS 2.1 | n/a | amplifiers – loudspeakers - stations |
| UFGS Section and Date | UFGS MAY 2012 | 27 52 23.00 20 | NURSE CALL SYSTEM 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 27 17 13 | Nurse Call Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | nurse call system for patients and staff |
| Subsystems | UFGS 1.3.1 | n/a | visual nurse call – audiovisual nurse call – centralized nurse call – centralized processor controlled |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| System Equipment | UFGS 2.1 | n/a | nurse assist stations – toilet emergency stations – patient stations |
| UFGS Section and Date | UFGS MAY 2012 | 27 52 32.00 10 | NURSE CALL TONE-VISUAL (NCTV) SYSTEM 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 27 17 13 | Nurse Call Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | nurse call system |
| Subsystems | UFGS 2.2 | n/a | emergency systems – code blue stations – annunciator stations |
| UFGS Section and Date | UFGS MAY 2012 | 27 54 00.00 20 | COMMUNITY ANTENNA TELEVISION (CATV) SYSTEMS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 25 23 11 | Television Broadcasting Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | cable television system |
| System Equipment | UFGS 2.2 | n/a | headend amplifiers – distribution amplifiers |
| UFGS Section and Date | UFGS MAY 2012 | 28 05 26.00 40 | GROUNDING AND BONDING FOR ELECTRONIC SAFETY AND SECURITY 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-35 39 00 | Electric Power Protection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |

| Attribute | Source | Unit | Value |
|-----------------------|-------------|-------|--|
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | electrical system and equipment grounding |
| Grounding Components | UFGS 2.1 | n/a | ground rods – ground wires – fasteners and connectors |

| | | | |
|---------------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 28 16 00.00 20 | BASIC INTRUSION DETECTION SYSTEMS (IDS) 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 11 23 | Intrusion Detection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | intrusion detection system and equipment |
| Intrusion Detection System Subsystems | UFGS 2.1 | n/a | detection – arm/disarm multiple function keypad – communications – assessment – alarm reporting – power |
| Detection Coverage | UFGS 2.3.1 | n/a | facility perimeter – critical spaces within the facility |
| Detection Alarms | UFGS 2.3.4 | n/a | intrusion detection – tamper – fail-safe – line fault – power loss – low battery in control communicator |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 28 16 01.00 10 | SMALL INTRUSION DETECTION SYSTEM 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 11 23 | Intrusion Detection Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Mounting | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | intrusion detection system and equipment |

| Attribute | Source | Unit | Value |
|---------------------------------------|---------------|----------------|---|
| Interior Sensors | UFGS 2.2 | n/a | balanced switch – glass break – duress alarm – security screen – vibration – motion – passive infrared – photo-electric |
| UFGS Section and Date | UFGS MAY 2012 | 28 20 00.00 20 | ELECTRONIC SECURITY SYSTEMS (ESS), COMMERCIAL 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 11 00 | Security Detection and Monitoring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | electronic security system |
| Intrusion Detection System Subsystems | UFGS 2.1 | n/a | intrusion detection – access control – communications – closed –circuit television – alarm reporting – power |
| Detection Alarms | UFGS 2.3.5 | n/a | intrusion detection – tamper – fail-safe – line fault – power loss |
| UFGS Section and Date | UFGS MAY 2012 | 28 20 01.00 10 | ELECTRONIC SECURITY SYSTEM 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 11 00 | Security Detection and Monitoring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | electronic security system |
| Control Devices | UFGS 2.6 | n/a | balanced switch – glass break – duress - vibration - passive infrared – photo-electric – seismic – motion |
| UFGS Section and Date | UFGS MAY 2012 | 28 20 02 | CENTRAL MONITORING SERVICES FOR ELECTRONIC SECURITY SYSTEMS 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 11 00 | Security Detection and Monitoring |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------|--------------|-------|--|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | central monitoring services |
| Alarm Verification | UFGS 3.2/3.3 | n/a | audio - video |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 28 23 23.00 10 | CLOSED CIRCUIT TELEVISION SYSTEMS 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 11 11 | Closed Circuit Television Equipment |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | closed circuit television systems |
| Enclosures | UFGS 2.2 | n/a | interior – exposed-to-weather – corrosion-resistant – hazardous environment |
| Cameras | UFGS 2.6 | n/a | high resolution monochrome – low-light monochrome – high-resolution color - dome |

| | | | |
|------------------------------|---------------|-------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 28 26 23 | DURESS SIGNAL SYSTEM [FOR BRIG FACILITIES] 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-37 27 11 | Duress Notification Devices |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| System Description | UFGS 2.1 | n/a | duress signal systems for brigs and detention facilities |
| Signal Stations | UFGS 2.1 | n/a | wall mounted – floor mounted |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 00.00 10 | FIRE DETECTION AND ALARM SYSTEM, DIRECT CURRENT LOOP 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | fire detection and alarm systems and central reporting system, direct current loop |
| Alarms and Devices | UFGS 2.6 | n/a | manual alarm stations – fire detecting devices |
| Fire Detecting Devices | UFGS 2.7 | n/a | heat – smoke – combination smoke and heat – flame |
| Notification Devices | UFGS 2.8 | n/a | alarm bells – alarm horns – chimes – visual notification |
| Transmitters | UFGS 2.11 | n/a | radio alarm – master fire alarm boxes – telephonic reporting system |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 02.00 20 | FIRE ALARM REPORTING SYSTEMS - DIGITAL COMMUNICATORS 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | facility-wide public fire reporting system |
| Communicators | UFGS 2.1 | n/a | transmitters - receivers |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 13.00 40 | FIRE DETECTION AND ALARM CONTROL, GUI, AND LOGIC SYSTEMS 08/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | supervised noncoded analog/addressable fire alarm system |
| Notification Appliances | UFGS 2.2.19 | n/a | fire – visual – horns – bells – chimes – combination audible-visual – voice evacuation |
| Fire Detecting Devices | UFGS 2.8 | n/a | heat – combination smoke and heat - flame |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 33.00 10 | FIRE ALARM REPORTING SYSTEM, RADIO TYPE 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | central reporting radio-type fire alarm system |
| Radio Devices | UFGS 2.3/2.4 | n/a | transmitter – interface device - monitoring base station |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 33.13 20 | EXTERIOR FIRE REPORTING SYSTEM, RADIO TYPE 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |

| Attribute | Source | Unit | Value |
|------------------------------|------------------|----------------|---|
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | facility wide radio fire reporting system connected to protected premises fire alarm system |
| Radio Devices | UFGS 2.1/2/2 | n/a | transmitters – master boxes – street boxes |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 49 | CARBON MONOXIDE DETECTORS 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 11 27 17 | Gas Detectors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | carbon monoxide detectors |
| Detectors | UFGS 2.1 | n/a | single station – multiple station |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 63.00 20 | ANALOG/ADDRESSABLE INTERIOR FIRE ALARM SYSTEM 10/07 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.3 | n/a | supervised non-coded analog/addressable fire alarm system |
| Fire Detecting Devices | UFGS 2.2.6/2.2.7 | n/a | photoelectric – ionization – duct - thermal |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 64.00 10 | FIRE DETECTION AND ALARM SYSTEM, ADDRESSABLE 08/09 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |

| Attribute | Source | Unit | Value |
|------------------------------|-------------|-------|--|
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | supervised fire alarm system |
| Fire Detecting Devices | UFGS 2.7 | n/a | heat - smoke - combination heat and smoke - flame |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 28 31 73.00 20 | EXTERIOR FIRE ALARM SYSTEM, CLOSED CIRCUIT TELEGRAPHIC TYPE 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | closed circuit telegraphic type exterior fire alarm reporting and receiving system |
| System Components | UFGS 2.1 | n/a | alarm receiving and decoding console - sounding devices - fire alarm boxes |

| | | | |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 28 31 74.00 20 | INTERIOR FIRE DETECTION AND ALARM SYSTEM 02/10 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| System Description | UFGS 1.4 | n/a | manual and automatic noncoated interior fire detection and alarm system |
| System Components | UFGS 2.2 | n/a | control panels – pull stations – detectors – notification appliances – surge suppression |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 75.00 10 | CENTRAL FIRE ALARM SYSTEM, DIGITAL ALARM COMMUNICATOR TYPE 11/08 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | supervised central fire alarm system |
| System Components | UFGS 2.3 | n/a | monitoring center - transmitters |
| UFGS Section and Date | UFGS MAY 2012 | 28 31 76 | INTERIOR FIRE ALARM AND MASS NOTIFICATION SYSTEM 08/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Mounting | COBie Guide | n/a | insert notes |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.4 | n/a | interior fire alarm and mass notification system |
| Alarm Initiating Devices | UFGS 2.3.1 | n/a | class A – class B – class X |
| Notification Appliances | UFGS 2.3.1 | n/a | class A – class B |
| Smoke Sensors | UFGS 2.10 | n/a | photoelectric – ionization – projected beam – duct – air sampling |
| Heat Detectors | UFGS 2.11 | n/a | fixed temperature – combination temperature and rate-of-rise – rate-compensating |

| Attribute | Source | Unit | Value |
|------------------------------|---------------|----------------|--|
| UFGS Section and Date | UFGS MAY 2012 | 28 33 00.00 40 | FUEL-GAS DETECTION AND ALARM 02/11 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-27 11 27 17 | Gas Detectors |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 2.1 | n/a | instruments for sensing combustible gases or deficiency of oxygen in ambient air |
| System Components | UFGS 2.3 | n/a | control units - detectors |
| UFGS Section and Date | UFGS MAY 2012 | 28 40 01 | WATCHTOUR SYSTEM [FOR BRIG FACILITIES] 04/06 |
| OCCS Table 23 Properties | OCCS MAY 2012 | 23-29 31 00 | Fire Notification Appliances |
| Name | COBie Guide | n/a | Type XX Space#-01 |
| Type | COBie Guide | n/a | Type XX |
| Location | COBie Guide | n/a | space name |
| Placement | COBie Guide | n/a | space - ceiling - wall - chase - site - roof |
| Basis-of-Design Manufacturer | COBie Guide | n/a | non-proprietary - proprietary |
| Basis-of-Design Model | COBie Guide | n/a | manufacturer's model number |
| Basis-of-Design Notes | COBie Guide | n/a | insert notes |
| Current | COBie Guide | Amps | insert value |
| Voltage | COBie Guide | Volts | insert value |
| Frequency | COBie Guide | Hz | insert value |
| Sustainability | COBie Guide | n/a | energy saving - regional sourcing - local supply - scheduled maintenance |
| System Description | UFGS 1.2 | n/a | watchtour system for prisoner housing units |
| System Equipment | UFGS 2.1 | n/a | watchtour station – watchtour panels – start station – data log unit |

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|---|-----------------------------|------------------------------|-------------------------------|--|--|
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| 14. ABSTRACT <p>The use of Building Information Modeling (BIM) technology beyond geometric collision detection requires that owners specify minimum content standards and define the formats in which BIM data are to be delivered. Such standards can be viewed as performance-based specifications for information deliverables that may be objectively tested and enforced. This report documents the specification of minimum BIM object definitions of 498 BIM object classes. These specifications were derived from Unified Facilities Guide Specifications (UFGS) requirements and typical equipment schedules published in "The COBie Guide" (http://buildingsmartalliance.org/index.php/projects/cobieguide/). Each object is classified based on the OmniClass Product Table Schema (http://www.omniclass.org/).</p> <p>The National Building Information Model Standard (NBIMS-US) has begun the process of coordinating the development of information-exchange standards in the United States. This document establishes the proposed minimum BIM object definitions for submittal under the round of NBIMS-US balloting scheduled for 2013.</p> | | | | | |
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